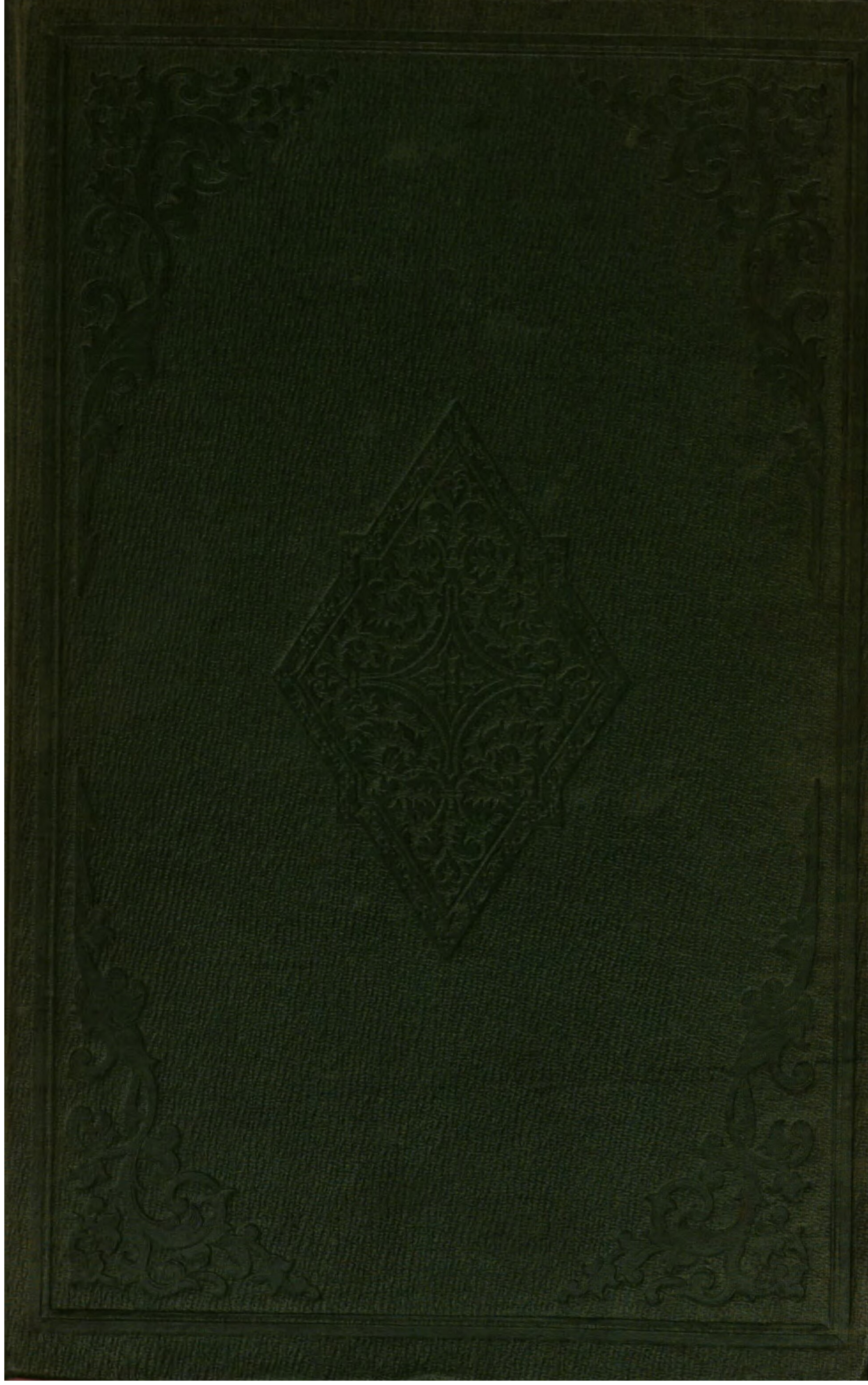




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GERANIACEÆ.

THE

NATURAL ORDER

OF

GERANIA,

ILLUSTRATED BY COLOURED FIGURES & DESCRIPTIONS;

COMPRISING

THE NUMEROUS AND BEAUTIFUL MULE-VARIETIES CULTIVATED IN THE GARDENS OF GREAT BRITAIN,

WITH

DIRECTIONS FOR THEIR TREATMENT.

BY ROBERT SWEET, F.L.S.

Author of Hortus Britannicus, Botanical Cultivator, The British Flower Garden, Cistineæ, The British Warblers, &c.

VOL. III.

LONDON:

JAMES RIDGWAY, PICCADILLY.

1824—1826.

GERANIACEÆ.

THE

BOOK OF NATURAL ORDER.

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GERANIA.

ILLUSTRATED BY COLOURED FIGURES & DESCRIPTIONS.

COMPILED

THE NUMEROUS AND BEAUTIFUL SPECIES OF GERANIA
CULTIVATED IN THE GARDENS OF GREAT BRITAIN.

WITH
A DESCRIPTION OF THE SEVERAL VARIETIES OF THE
GERANIACEÆ.

DIRECTIONS FOR THEIR CULTURE.

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BY ROBERT SWEET, F.R.S.

Author of *Hortus Britannicus*, *Botanical Cabinet*, *The British
Flora*, *London*, *Edinburgh*, *The British Wildflowers*, &c.

AND
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LONDON:
JAMES RIDGWAY, PICCADILLY.

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BOOKS QUOTED IN THE THIRD VOLUME,

IN

ADDITION TO THOSE ENUMERATED IN THE FIRST
AND SECOND.

DC. prodr. DE CANDOLLE (Augustin Pyramus.) *Prodromus systematis naturalis regni vegetabilis. pars 1 et 2. Paris. 8vo. 1824—1825.*

Desf. arb. DESFONTAINES (Renè Louiche.) *Histoire des arbres et arbrisseaux qui peuvent être cultivés en pleine terre sur le sol de la France. 2 vol. in 8vo. Paris. 1809.*

Forskahl descr. FORSKAHL (Petrus.) *Flora Ægyptiaco-arabica. 1 vol. in 4to. Hauniæ. 1775.*

Horn. sup. HORNEMANN (J. W.) *Hortii regii Botanici Hafniensis supplementum, in 12mo. Hafniæ. 1819.*

Linn. f. supp. LINNÆUS FILIUS (Carolus.) *Supplementum Plantarum. 1 vol. in 8vo. Brunsvigiæ. 1781.*

Murr. goett. *Commentarii Societatis regię scientiarum Gottin-
gensis. in 4 vol. 1751—1754—1769—1816.*

Schleich. cat. SCHLEICHER. (J. C.) *Catalogus hucusque absolu-
tus omnium plantarum in Helvetia. Camberii. 1821.*

Swt. hort. brit. Sweet's *Hortus Britannicus, or a Catalogue of the
plants cultivated in the gardens of Great Britain, arranged
according to their natural orders, with reference to Figures,
and numerous synonyms. 1 vol. 8vo. London. 1826.*

Ten. prodr. fl. neap. TENORE (Michel.) *Floræ Neapolitanæ
Prodromi. Neapoli. 1811—1813.*





PELARGONIUM calocephalon.

Pretty-headed Stork's-bill.

P. calocephalon, umbellis plurifloris capitatis, foliis planis cordatis subseptemlobatis hirsutis dentatis: lobis acutiusculis, stipulis acuminatis subdentatis, tubo nectarifero calyce duplo brevior.

Tull's Imperial Geranium. *Hortulanorum.*

Stem shrubby, branching; *branches* spreading, thickly clothed with long shaggy hairs, as are the petioles, peduncles, and calyx. *Leaves* flat, cordate, acute, deeply 5 or 7-lobed, thickly clothed on both sides with short hairs, sharply toothed with short unequal teeth, strongly and numerously nerved underneath: lobes a little pointed. *Petioles* shorter than the leaves, flattened and furrowed on the upper side and convex on the lower, a little widened at the base. *Stipules* lanceolate, taper pointed, fringed, sometimes toothed. *Peduncles* cylindrical, several-flowered. *Flowers* in a close compact head. *Involucre* of six or seven long lanceolate acute keeled bractes. *Pedicles* very short, scarcely half the length of the bractes. *Calyx* 5-cleft, segments very long, lanceolate, acute, spreading or slightly reflexed. *Nectariferous tube* about half the length of the calyx, flattened and furrowed on each side, villous. *Petals* 5, all obovate, of a pale blush; upper ones elegantly marked with a red spot and numerous branching lines. *Stamens* 10, united at the base, seven producing anthers which are always without pollen. *Style* long, flesh-coloured, very hairy on the lower part and smooth upwards. *Stigmas* 5, of the same colour, with curled points.

Our drawing was taken from a plant received from the Nursery of Mr. James Lee, of Hammersmith. It is of hybrid origin; and we suspect one of its parents to be *P. augustum*; the other is likely to be one of the varieties of *P. cucullatum*. It is nearer related to *P. augustum* than any other with which we are acquainted, but differs sufficiently. We have never yet seen it with perfect anthers; in all the plants that we have examined, they have been destitute of pollen. It is a fine strong-growing plant, and produces a great abundance of flowers, which continue to bloom in succession from May to November. The best soil for it is a mixture of turfy loam and peat, or any rich vegetable mould, requiring only to be protected from frost. Cuttings soon strike root, if planted under hand-glasses, or in pots placed in the greenhouse.

Stem shrubby, branching; branches spreading, thickly clothed with long shaggy hairs, as are the petioles, peduncles, and calyx. Leaves flat, cordate, acute, deeply 5 or 7-lobed, thickly clothed on both sides with short hairs, sharply toothed with short unequal teeth, strongly and uniformly marked underneath; lobes a little pointed. Petioles shorter than the leaves, flattened and furrowed on the upper side and convex on the lower, a little widened at the base. Spikes terminal, taper pointed, fringed, sometimes toothed. Flowers cylindrical, several-flowered. Flowers in a close compact head. Calyxes of six or seven long lanceolate acute-toothed bracts. Petioles very short, strongly flat the length of the bracts. (Sepals 5-lobed, segments very long, lanceolate, acute, spreading or slightly reflexed. Anthers tube about half the length of the calyx, flattened and furrowed on each side, villous. Petals 5, all opposite, of a pale blush; upper ones elegantly marked with a red spot and numerous branching lines. Stamens 10, united at the base, seven producing anthers which are always without pollen. Style long, flesh-coloured, very hairy on the lower part and smooth upwards. Stigmas 5, of the same colour, with curled points.



DIMACRIA elegans.*Elegant Dimacria.*

D. elegans, subacaule, scapo folioso, foliis pinnatifido-laciniatis canescenti-pubescentibus; segmentis oblongis obtusis integris bifidisque, umbella composita, petalis patentibus, calycibus reflexis, tubo nectarifero calyce triplo longiore.

Dimacria elegans. *Colv. catal. ed. 2. p. 21. col. 2.*

Root tuberous, branching out into other smaller tubers. *Stem* none. *Leaves* pinnatifid or laciniate: segments oblong, obtuse, entire or 2-fid, seldom toothed, thickly clothed with a short canescent pubescence. *Petioles* slender, a little flattened on the upper side and convex on the lower, thickly clothed with short silky hairs. *Stipules* lanceolate, acute, joined to the base of the petioles. *Scape* leafy, branching, and bearing many umbels of flowers. *Umbels* many-flowered. *Involucre* of numerous linear, acute, fringed bractes. *Pedicles* very short, scarcely as long as the bractes. *Calyx* 5-cleft; segments lanceolate, unequal, all reflexed. *Nectariferous tube* flattened and keeled at the back, about three times longer than the calyx. *Petals* 5, spreading, of a scarlet orangy colour; two upper ones distinct at the base, broadly spatulate, a little waved, and marked from the base with numerous dark lines, which branch in various directions; lower petals ligulate, self-coloured. *Filaments* 10, united at the base, five only bearing anthers; two lower fertile ones longest, as in the others of the genus; upper one very short; barren ones short, erect, and subulate. *Style* red, hairy at the base and smooth at the point. *Stigmas* 5, red, reflexed.

Since the Descriptions and Indices for our last Number were sent home from the press, we have received the first volume of the very extensive and interesting *PRODROMUS* of M. DE CANDOLLE. The learned author of the above work has adopted our subdivision of the genus *Pelargonium* as Sections or Subgenera; but we are quite certain that we cannot do better than to continue them as distinct genera; for, if we were to join them all with *Pelargonium*, it would be quite impossible to find names for them. We already find it difficult, though perhaps one fourth part of them are not yet described. M. De Candolle describes three hundred and sixty-nine; and we believe more than one thousand are cultivated in the collections of this country; and we have been informed, by various travellers from the Cape, that they are there without end. Mr. J. Niven, who was there collecting plants and seeds for several years, on his return informed me, that the shrubby species were innumerable; so much so, that he paid no attention to them: and we have heard from others, that the tuberous-rooted tribe is as numerous in other situations. Many of the latter, introduced by Mr. Niven, are now lost in our collections, as the cultivation of them at that time was not so well known as at present: amongst the rest, the beautiful *P. Grenvilleæ*, *roseum*, and *incrassatum*, have, I believe, entirely disappeared. Mr. Colvill informs me, that at that time he had another magnificent one, nearly related to those, with large panicles of golden yellow flowers: this was thrown down from a shelf by a cat when in full flower, which caused its death.

The present beautiful plant is a hybrid production, and was raised in the magnificent collection of R. Henry Jenkinson, Esq. from a seed of *D. pinnata*, that had been fertilized by *P. fulgidum*. It requires the same treatment as the other tuberous-rooted kinds, and may be increased by the little tubers from the roots. The anthers are perfect, and it ripens seeds.





PELARGONIUM incanescens.

Whitish-leaved Stork's-bill.

P. incanescens, umbellis subquinquefloris, foliis cordatis, profunde quinquelobis dentatis canescenti-pubescentibus, stipulis acuminatis, petalis superioribus venosis, tubo nectarifero calyce parum longiore.

Stem shrubby, erect, branched; *branches* thickly clothed with soft villous hairs, as are the petioles, peduncles, and calyx. *Leaves* cordate, deeply lobed with sharp lobes, unequally but sharply toothed, thickly clothed with a hoary pubescence, strongly and numerously nerved underneath; lower ones 5 to 7-lobed; upper ones 3 to 5-lobed, more acute. *Petioles* flattened and furrowed on the upper side and convex on the lower. *Stipules* broadly lanceolate, taper-pointed, fringed. *Peduncles* 3 to 5-flowered, longer than the leaves. *Involucre* of six or seven lanceolate, keeled, taper-pointed, ciliate bractes. *Pedicles* longer than the bractes, villous. *Calyx* 5-cleft; segments lanceolate, taper-pointed, erect. *Nectariferous tube* a little longer than the calyx, flattened on each side, of a brownish purple. *Petals* 5, the two upper ones oblongly ovate, oblique at the base, of a pale lilac, with a dark velvety spot in the centre, and from the base to the point, branch numerous purple lines in all directions; lower petals oblong, spreading, pale lilac. *Filaments* 10, united at the base, seven bearing anthers: *pollen* orange-coloured. *Style* red, very hairy on the lower part, and smooth on the upper. *Stigmas* 5, of the same colour, reflexed.

The present plant is of hybrid origin, and was raised last year, at the Nursery of Mr. Colvill, from a

seed of *P. dumosum* that had been mixed with the pollen of one of the larger sorts, perhaps *P. æmulum* or *cardiifolium*. It is a very fine strong-growing sort, and its beautiful large flowers, which are produced in abundance, make it a very desirable plant. It may be considered as one of the late-flowering sorts, as it continued in flower this autumn till the beginning of December. It thrives well in a mixture of turfy loam and peat, or any other rich vegetable soil. Cuttings soon strike root, if planted in pots and placed in a sheltered situation.

Stem shrubby, erect, branched; branches thickly clothed with soft villous hairs, as are the petioles, peduncles, and calyx. Leaves cordate, deeply lobed with sharp lobes, unequally but sharply toothed, thickly clothed with a hoary pubescence, strongly and minutely nerv'd underneath; lower ones 5 to 7-lobed; upper ones 3 to 5-lobed, more acute. Petioles flattened and narrowed on the upper side and convex on the lower. Stipules broadly lanceolate, taper-pointed, fringed. Peduncles 3 to 5-flowered, longer than the leaves. Bracts of six or seven lanceolate, keeled, taper-pointed, entire bracts. Bracts longer than the bracts, villous. Calyx 5-lobed; segments lanceolate, taper-pointed, erect. Petals 5, the two upper ones oblongly ovate, oblique at the base, or a pale line with a dark velvety spot in the centre, and from the base to the point, branch numerous purple lines in all directions; lower petals oblong, spreading, pale blue. Stamens 10, united at the base, seven bearing anthers; pollen orange-coloured. Style red; very hairy on the lower part, and smooth on the upper. Stigmas 5, of the same colour, reflexed.

The present plant is of hybrid origin, and was raised last year, at the Nursery of Mr. Cobbold, from a





E. D. Smith. del.

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J. Watts. sc.

PELARGONIUM modestum.

Modest Stork's-bill.

P. modestum, pedunculis villosis 2-3-floris, foliis cordatis trilobis undulatis rugosis denticulatis obtusis utrinque hirsutis; lobis rotundatis divaricatis, caule erecto ramoso, calycibus reflexis, tubo nectarifero calyce parum brevior.

Stem shrubby, erect, much branched; *branches* short, spreading, thickly clothed with long villous hairs, as are the petioles, peduncles, and calyx. *Leaves* small, cordate, 3-lobed, undulate, rugose, and toothed with small pointed teeth, thickly covered with hairs on both sides: *lobes* spreading, blunt, and rounded, terminal one largest, strongly veined. *Petioles* about the length of the leaves, flattened and furrowed on the upper side, and convex on the lower, widened at the base. *Stipules* short and broad, cordate, acute, fringed. *Peduncles* short, cylindrical, 2 to 3-flowered. *Involucre* of six or seven short, cordate or broadly ovate, acute, fringed bractes, which are often toothed. *Pedicels* long and robust, unequal in length, bent upwards. *Calyx* 5-cleft; segments unequal, all reflexed, the upper one largest, ovate, the others broadly lanceolate. *Nectariferous tube* short and broad, scarcely as long as the calyx. *Petals* 5, the two upper ones roundly obovate, oblique at the base, of a pale blush-colour, marked in the centre with a large patch of pale red, at the base of which are some darker marks; lower petals oblong, obtuse, pale blush. *Filaments* 10, united at the base, seven bearing anthers. *Pollen* orange-coloured. *Germen* and *aristæ* villous. *Style*

pale red, hairy at the base and smooth upwards. *Stigmas* 5, reflexed.

Our drawing of this very pretty plant was taken from a fine specimen at the Nursery of Mr. Colvill, where it was raised from a seed of *P. ornatum* mixed with the pollen of one of the larger sorts, perhaps *P. platypetalum*. It grows to the height of three feet, and is very bushy, bearing abundance of flowers all the summer. It succeeds well in a mixture of turfy loam and peat, or any other rich vegetable soil; and cuttings root freely, if planted in pots and placed on a shelf in the greenhouse.

Stem shrubby, erect, much branched; branches short, spreading, thickly clothed with long villous hairs, as are the petioles, peduncles, and calyx. Leaves small, cordate, 3-lobed, undulate, rugose, and toothed with small pointed teeth, thickly covered with hairs on both sides: lobes spreading, blunt, and rounded, terminal one largest, strongly veined. Petioles about the length of the leaves, flattened and narrowed on the upper side, and convex on the lower, widened at the base. Stipules short and broad, cordate, acute, fringed. Peduncles short, cylindrical, 2 to 3-flowered. Flowers of six or seven short, cordate or broadly ovate, acute, fringed bracts, which are often toothed. Petals long and robust, unequal in length, bent upwards. Calyx 5-lobed; segments unequal, all reflexed, the upper one largest, ovate, the others broadly lanceolate. Nectary-tube short and broad, scarcely as long as the calyx. Styles 5, the two upper ones roundly obovate, oblique at the base, of a pale bluish colour, marked in the centre with a large patch of pale red, at the base of which are some darker marks; lower petals oblong, obtuse, pale bluish. Filaments 10, united at the base, seven bearing anthers. Pollen orange-coloured. Germen and ovule villous. Style



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J. Watts.

PELARGONIUM *Saundersii*.

Saunders' Stork's-bill.

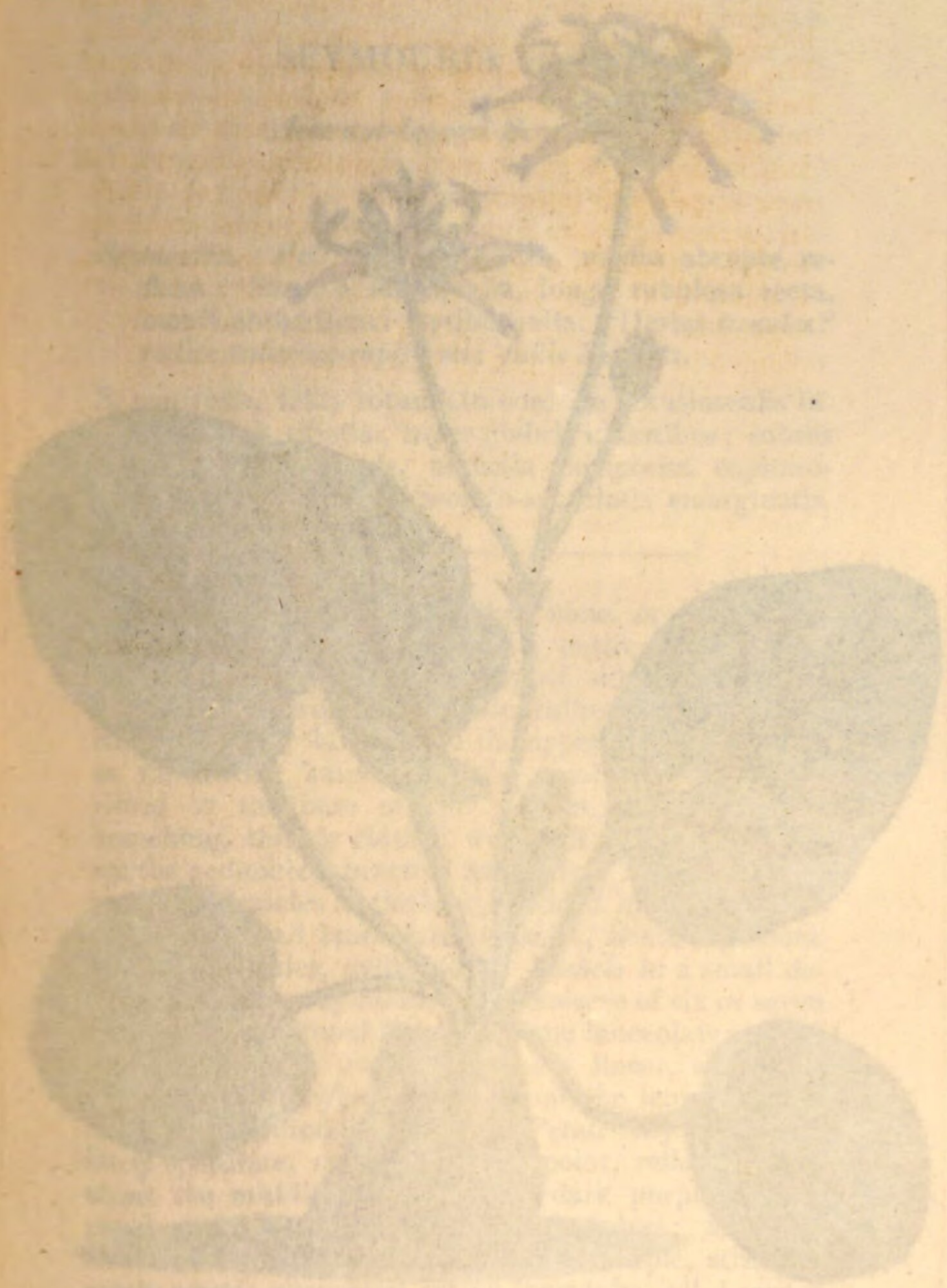
P. Saundersii, umbellis subquadrifloris, foliis basi truncatis trilobis planis glabriusculis: lobis divaricatis obtusis inæqualiter obtuse dentatis, stipulis cordatis acutis ciliatis, tubo nectarifero calyce parum brevior.

Stem shrubby, much branched; *branches* glossy, thinly clothed with short hairs. *Leaves* truncate at the base, deeply 3-lobed, flat, smooth on the upper side, and covered with a very short pubescence on the lower; nerves few, but prominent, branched: lobes divaricate, obtuse, unequally toothed with short blunt teeth. *Petiole* slender, flattened and furrowed on the upper side and convex on the lower, slightly pubescent. *Stipules* short and flat, broadly cordate, acute, entire, fringed. *Peduncles* cylindrical, generally 3 or 4-flowered, clothed with short spreading hairs. *Involucre* of six ovate, acute, fringed bractes. *Pedicles* unequal in length, longer than the bractes. *Calyx* 5-cleft; segments lanceolate, acute, fringed; upper one erect, the others reflexed. *Nectariferous tube* unequal in length, some about half the length, others scarcely shorter than the calyx. *Petals* 5, the two upper ones obovate, oblique at the base, of a rosy lilac, with a dark velvet spot in the centre, and a few short dark lines below it and branching from it: lower petals oblong, obtuse, of a lighter colour. *Filaments* 10, united at the base, seven bearing anthers. *Pollen* orange-coloured. *Style* red, hairy on the lower part and smooth upwards. *Stigmas* 5, reflexed.

The plant from which our drawing was taken was kindly sent to us from the collection of C. Hoare, Esq. We have named it in compliment to Mr. Richard Saunders, the gardener; who informs us, that he raised it from a seed of *P. Thynneæ*, that had been fertilized by the pollen of *P. dumosum*; and it is as near as possible intermediate between the two. Like its parents, it is an abundant bloomer, and continues to flower the whole of the summer. It thrives well in a mixture of turfy loam and peat, or any other rich vegetable mould; and cuttings strike root readily, if planted in pots and placed in a sheltered situation.

previore.

Stem shrubby, much branched; branches glossy, thinly clothed with short hairs. Leaves truncate at the base, deeply 3-lobed, flat, smooth on the upper side, and covered with a very short pubescence on the lower; nerves few, but prominent, branched: lobes divaricate, obtuse, unequally toothed with short blunt teeth. Petiole slender, flattened and furrowed on the upper side and convex on the lower, slightly pubescent. Stipules short and flat, broadly cordate, acute, entire, fringed. Peduncles cylindrical, generally 3 or 4-flowered, clothed with short spreading hairs. Bracts linear, acute, fringed, pointed. Calyx 5-angled, unequal in length, longer than the bracts. Corolla 5-lobed; segments lanceolate, acute, fringed; upper one erect, the others reflexed. A very few fine unequal in length, some about half the length, others scarcely shorter than the calyx. Petals 5, the two upper ones obovate, oblique at the base, of a very light, with a dark velvet spot in the centre, and a few short dark lines below it and branching from it; lower petals oblong, obtuse, of a lighter colour. Filaments 10, united at the base, seven bearing anthers. Pollen orange-coloured. Style red, hairy on the lower part and smooth upwards. Stigma 2-lobed.





G. D. Smith. del. Pub. by J. Ridgway 170 Piccadilly Apr. 1. 1824.

J. Watts. sc.

SEYMOURIA asarifolia.

Asarum-leaved Seymouria.

Seymouria. *Pet.* 2 basi distincta, medio abrupte reflexa. *Stam.* 5 subæqualia, longe tubulosa recta, omnia antherifera: sterilia nulla. *Herbæ acaules?* *radice tuberoso-rapiformi; foliis indivisis.*

S. asarifolia, foliis rotundato-cordatis obtusiusculis integerrimis ciliatis: super glabris nitentibus: subtus tomentoso-velutinis, umbella composita capitato-depressa, petalis lanceolato-spatulatis emarginatis.

Root tuberous, large. *Stem* none, or very short. *Leaves* roundly cordate, bluntish, entire, ciliate; of a bright shining green on the upper side, and densely tomentose underneath. *Petioles* rather broadest at the base and point, flattened on the upper side and convex on the lower, hairy. *Stipules* small, taper-pointed, joined to the base of the petioles. *Scape* leafless, branching, thickly clothed with soft villous hairs, as are the peduncles, bractes, and calyx. *Bracte* inclosing the peduncles at the base, divided into several unequal ovate and lanceolate, concave, acute segments. *Peduncles* slender, cylindrical. *Umbels* in a small depressed head, many-flowered. *Involucre* of six or seven narrow taper-pointed bractes; some lanceolate, others subulate. *Calyx* 5-cleft, segments linear, acute, all reflexed. *Nectariferous tube* about the length of the calyx, slightly nodding, hairy. *Petals* only 2, lanceolately-spatulate, notched at the point, reflexed from about the middle, of a brilliant dark purple, variegated and spotted with a blackish velvet: no rudiments of lower petals. *Filaments* 5, purple, straight, nearly equal, connected into a long tube, all bearing

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anthers: no rudiments of sterile ones. *Pollen* orange-coloured. *Style* very hairy, about the length of the stamens. *Stigmas* 5, at length revolute.

This very curious plant is a native of the Cape, and was received from thence, about three years since, by Mr. Colvill, at whose Nursery it first flowered in December 1822, at which time our drawing was taken; it flowered again in November and December 1823, when we made our description. We have proposed it as a distinct genus, and have named it in compliment to the Hon. Mrs. Seymour, of Woburn, Bedfordshire, a lady much attached to botanical science, and particularly partial to the GERANIACEÆ; also a great admirer of neat little Alpine plants, to which the present genus bears a strong resemblance. Another species, or a very distinct variety, has also flowered at Mr. Colvill's, with smaller acute petals; but we wish to see it in flower again before we publish it. *PELARGONIUM dipetalum* of L'Héritier will no doubt rank as another species, and may be named *Seymouria Héritieri*.

The species of this genus require the same kind of treatment as the other tuberous-rooted species of the family; but as they flower in winter, or late in autumn, they must be kept growing at that season, watering them sparingly when dry, and letting them become dormant after flowering. They succeed well in a mixture of turfy loam, peat, and sand, an equal quantity of each; and they may be increased by the little tubers from the roots.





G. D. Smith. del.

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J. Watts sc.

PELARGONIUM phœniceum.

Reddish purple Stork's-bill.

P. phœniceum, umbellis plurifloris, foliis rotundato-reniformibus undulatis cucullatis rugosis villosis inæqualiter dentatis, stipulis cordato-ovatis acutis, calycibus villosissimis, tubo nectarifero calyce parum brevior.

Stem erect, branching; *branches* spreading, thickly clothed with long white villous hairs, as are the petioles, peduncles, and calyx. *Leaves* roundly-reniform, undulate, cucullate, rigid, rugose, thickly clothed with short villous hairs, and toothed with numerous unequal teeth. *Petioles* gradually tapering upwards, flattened and furrowed on the upper side and convex on the lower, a little widened at the base. *Stipules* cordate, or broadly ovate, acute, ciliate. *Peduncles* cylindrical, several-flowered. *Involucre* of six ovate, acute, keeled, ciliate bractes. *Pedicles* villous, about the length of the bractes. *Calyx* 5-cleft, segments broadly lanceolate, acute, thickly clothed with long villous hairs. *Nectariferous tube* scarcely as long as the calyx, flattened on each side, gibbous at the base, villous. *Petals* 5, the two upper ones broadly ovate, oblique at the base, of a dark reddish purple, with a dark velvety spot in the centre, and below that are numerous dark branching lines; lower petals obovately-oblong, of rather a lighter colour. *Filaments* 10, united at the base, seven bearing anthers. *Style* red, very hairy. *Stigmas* 5, purple, revolute.

Our drawing of this plant was taken at the Nursery of Mr. Colvill last October. It was raised the preceding spring from a seed of *P. spectabile* δ . *recurvum*,

that had been fertilized by the pollen of *P. Dennisianum*. The seed was sown in February, and the plant flowered in September; so that it was only seven months from the time the seed was sown till it flowered, and it continued in full bloom to the end of December. It is now forward in bud again, so that we may expect it will flower nearly all the year through. It appears to be of very free growth, and as hardy as any of the nearly related sorts, thriving well in a mixture of turfy loam, peat, and sand; and cuttings root readily planted in pots in the same kind of soil, and placed on a shelf in the greenhouse.

This may be considered as one of the most desirable mules that has yet been raised, both from the abundance of bloom, and its brilliancy of colour, which partakes of a mixture of scarlet and purple, and is difficult of imitation by the artist, whose colours can never equal nature. Though we have often been told that our figures are flattered, yet if any person will take the trouble of comparing them with the living plants, he will readily perceive his mistake.

Our drawing of this plant was taken at the Nursery of Mr. Colvill last October. It was raised the preceding spring from a seed of *P. spectabile* & *tricolor*.



C. D. Smith. del.

Pub. by J. Ridgway 170 Piccadilly Apr. 1. 1824.

J. Walts. sc.

PELARGONIUM notatum.

Marked-petaled Stork's-bill.

P. notatum, pedunculis elongatis plurifloris, foliis cordatis trilobis concavis scabris: margine crispis denticulatis, stipulis acuminatis, petalis venosis, tubo nectarifero calyce reflexo sesquilongiori.

Rosalind Geranium. *Hoare MSS.*

Stem shrubby, slender, branching: *branches* slender, elongated, spreading, thickly clothed with short white pubescent hairs, and slightly knotted at the joints. *Leaves* cordate, acute, 3-lobed, concave, roughish, clothed on both sides with short white hairs, margins curled, and toothed with small unequal teeth. *Petioles* long and slender, flattened and furrowed on the upper side, pubescent. *Stipules* lanceolate, taper-pointed, fringed. *Peduncles* long and slender, cylindrical, pubescent. *Involucre* of six lanceolate, taper-pointed, fringed bractes. *Pedicles* long and slender, pubescent. *Calyx* 5-cleft, segments broadly lanceolate, acute, the upper one erect, the others reflexed. *Nectariferous tube* much flattened, gibbous at the base, pubescent, about half as long again as the calyx. *Petals* 5, much veined, the two upper ones obovate, oblique, of a rosy lilac; with a bright purple mark in the centre, and numerous purple lines branching in every direction; lower petals oblongly obovate, slender at the base, of a lighter colour and not so much veined. *Filaments* 10, connected at the base, seven bearing anthers. *Germen* villous. *Style* very hairy at the base, and smooth upwards. *Stigmas* 5, red, reflexed.

This neat little plant is of hybrid origin, and was

raised from seed by Sir R. C. Hoare, who sent us the plant from which our drawing was taken. What its parents were is at present unknown to us: perhaps hybrid for several generations. Being so different from all others, it is a very desirable plant; and being of small growth, it takes but little room: it is also as hardy as any of the genus, and thrives well in a mixture of turfy loam and peat, or any rich light soil. Cuttings root freely, if planted in pots, and set on a shelf in the greenhouse.

Rosalind Geranium. Hoare MSS.

Stem shrubby, slender, branching: branches slender, elongated, spreading, thickly clothed with short white pubescent hairs, and slightly knotted at the joints. Leaves cordate, acute, 3-lobed, concave, roughish, clothed on both sides with short white hairs, margins curled, and toothed with small unequal teeth. Petioles long and slender, flattened and narrowed on the upper side, pubescent. Stipules lanceolate, taper-pointed, fringed. Peduncles long and slender, cylindrical, pubescent. involucres of six lanceolate, taper-pointed, fringed bracts. Petals long and slender, pubescent. Calyx 5-lobed, segments broadly lanceolate, acute, the upper one erect, the others reflexed. Nectaries four, tube much flattened, ribbons at the base, pubescent, about half as long again as the calyx. Petals 5, much veined, the two upper ones obovate, oblique, of a rosy lilac, with a bright purple mark in the centre, and numerous purple lines branching in every direction; lower petals oblongly obovate, slender at the base, of a lighter colour and not so much veined. Filaments 10, connected at the base, seven bearing anthers. Germen yellow. Style very hairy at the base, and smooth upwards. Stigma 5, red, reflexed.

This neat little plant is of hybrid origin and was

IMBARKA

Imbarka

Imbarka

Imbarka

Imbarka

Root tuberous. Stem none. Leaves opposite, lower ones simple, cordate ovate, others very pinnate or pinnatifid, lobes ovate or elliptic, bluntly or obtusely rounded, the lobes very unequal, the upper ones very deeply pinnate. Petioles short, but the lower ones are very long and slender. The flowers are small, white, and very numerous. The fruit is a small, round, greenish-yellow berry, which is very hard and contains a single seed. The plant is very common in the mountains of the Himalayas, and is used by the natives for medicinal purposes.



E. D. Smith. del. Pub. by T. Agnew, 170 Piccadilly May 1 1824.

J. Watts. sc.

HOAREA venosa.

Veined-petaled Hoarea.

H. venosa, umbella composita, foliis ternatis pinnatifidis pinnatisque canescenti-pubescentibus; foliolis oblongis ovatisque obtusis: terminali maximo, petalis superioribus spatulato-ligulatis reflexis venosis.

Root tuberous. *Stem* none. *Leaves* variable, lower ones simple, roundly ovate, others ternate, pinnatifid, or pinnate: leaflets opposite or alternate, oblong or ovate, bluntly rounded; the lowermost smallest and narrowest, terminal, one very large, rounded, all covered with a white mealy pubescence. *Petioles* slender, slightly flattened on the upper side and convex on the lower, thickly clothed with short white hairs, as are the peduncles and calyx. *Stipules* subulately-linear, joined to the base of the petioles. *Scape* leafy, producing several umbels of flowers. *Peduncles* cylindrical. *Umbels* many-flowered. *Involucre* of numerous linear taper-pointed fringed bractes. *Pedicles* very short. *Calyx* 5-cleft; upper segment lanceolate, concave, erect; the others linear, reflexed. *Nectariferous tube* about twice the length of the calyx, flattened on each side, hairy. *Petals* 5; the two upper ones spatulately ligulate, reflexed about the middle, with two long ungues, much veined with red and purple veins which branch in various directions; lower petals about half the width, of a paler colour and less veined. *Filaments* 10, united at the base, five only bearing anthers; sterile ones short, their points bent inwards. *Style* short, purple, slightly hairy at the base, and smooth upwards. *Stigmas* 5, reflexed.

This pretty and curious plant is of hybrid origin, the produce of *Dimacria pinnata* that had been fertilized by the pollen of *Hoarea reticulata*: the leaves partake chiefly of the former, and the flowers of the latter: its stamens are perfect, and it produces seeds. The same kind of treatment, as recommended for the other tuberous-rooted species, is also applicable to the present, keeping it quite dry while dormant, and it may be increased by the little tubers of its roots.

Drawn at the Nursery of Mr. Colvill last summer, where it continued to be covered with flowers, in succession, from June to October.

Root tuberous. Stem none. Leaves variable, lower ones simple, roughly ovate, others ternate, pinnatifid, or pinnate: leaflets opposite or alternate, oblong or ovate, bluntly rounded; the lowermost smallest and narrowest, terminal, one very large, rounded, all covered with a white mealy pubescence. Petioles slender, slightly flattened on the upper side and convex on the lower, thickly clothed with short white hairs, as are the peduncles and calyx. Stipules subulately-linear, joined to the base of the petioles. Stipules leafy, producing several umbels of flowers. Peduncles cylindrical. Flowers many-flowered. Bracts of numerous linear-lanceolate fringed bracts. Petioles very short. Calyx 5-lobed; upper segment lanceolate, concave, erect; the others linear, reflexed. Petals 5, one tube about twice the length of the calyx, flattened on each side, hairy. The two upper ones again laterally ligulate, reflexed about the middle with two long ungues, when joined with red and purple veins which branch in various directions; lower petals about half the width of a petal colour and less veined. Filaments 10, united at the base, five only bearing anthers; steriles ones short, three points bent inwards. Style short, purple, slightly hairy at the base, and smooth upwards. Stigma 3, reflexed.



C. D. Smith. del.

Pub. by J. Ridgway 170 Piccadilly May. 1. 1824.

J. Malt. sc.

PELARGONIUM fuscatum.

Brown-marked Stork's-bill.

P. fuscatum, pedunculis plurifloris, foliis cordatis obsolete trilobis planis inæqualiter dentatis villosis, stipulis cordato ovatis subdentatis, caule villoso, tubo nectarifero calyce parum longiore.

Pelargonium fuscatum. *Colv. catal. ed. 2. p. 22. col. 3.*

Stem shrubby, erect, much branched; *branches* erect, thickly clothed with long villous hairs, as is every other part of the plant, except the corolla. *Leaves* flat, cordate, rounded, slightly 3-lobed, unequally toothed with numerous small sharp teeth, prominently and numerous veined underneath. *Petioles* flattened and furrowed on the upper side, and convex on the lower; a little widened at the base. *Stipules* short, cordate or ovate, sometimes toothed, acute, fringed. *Peduncles* cylindrical, several-flowered. *Involucre* of six or seven ovate, acute, fringed bractes. *Pedicles* unequal in length, longer than the nectariferous tube. *Calyx* 5-cleft, segments all reflexed; the upper one ovate, the others lanceolate, acute, fringed. *Nectariferous tube* much flattened and gibbous at the base; a little longer than the calyx. *Petals* 5, the two upper ones roundly ovate, of a bluish lilac, with a large dark brown mark in the centre, stained round with red, and below it are a few dark lines, that are slightly branched; lower petals oblong, of a bluish lilac. *Filaments* 10, united at the base, seven bearing anthers. *Germen* villous. *Style* very hairy about half-way up, and smooth on the upper part. *Stigmas* 5, reflexed.

The present subject is a hybrid production, and

was raised the year before last at the Nursery of Mr. Colvill, where our drawing was made last summer. It is the produce of *P. dumosum*, that had been mixed with the pollen of one of the larger sorts, perhaps *P. multinerve*; but of this we are not quite certain. It is a very ornamental plant, and an abundant bloomer like its parent, and grows to a middle size: it is also as hardy as any of the genus, and thrives well in a mixture of sandy loam and peat, or any light rich vegetable mould. Cuttings strike root freely, if planted in pots and placed in a sheltered situation.

Stems shrubby, erect, much branched; branches erect, thickly clothed with long villous hairs as is every other part of the plant, except the corolla. Leaves flat, cordate, rounded, slightly 3-lobed, unequally toothed with numerous small sharp teeth, prominently and numerous veins underneath. Petioles flattened and furrowed on the upper side, and convex on the lower; a little whitened at the base. Stipules short, cordate or ovate, sometimes toothed, acute, fringed. Peduncles cylindrical, several-flowered. Anthers of six or seven ovate, acute, fringed bristles. Petals unequal in length, longer than the anthers; the upper one ovate, the others lanceolate, acute, fringed. Anthers very long, much flattened and gibbous at the base; a little longer than the calyx. Petals 5, the two upper ones rounded, of a bluish lilac, with a large dark brown mark in the centre, stained round with red, and below it are a few dark lines, that are slightly branched; lower petals oblong, of a bluish lilac. Peduncles 10, united at the base, seven bearing anthers. Styles villous. Style very hairy about half-way up, and anthers on the upper part. Stigma 5, reflexed.

The present subject is a hybrid production, and

PHILADELPHIA BOTANICAL GARDEN





PELARGONIUM heracleifolium.

Heracleum-leaved Stork's-bill.

P. heracleifolium, acaule, umbellis plurifloris, foliis inferioribus oblongis integris laciniatisque superioribus pinnatifidis pinnatisque pulverulento-pubescentibus; segmentis foliolisque oblongis obtusis sinuato-lobatis inæqualiter obtuse dentatis, calycibus reflexis, tubo nectarifero calyce triplo longiori.

Pelargonium heracleifolium. *Lodd. bot. cab. t. 437.*
Colv. catal. ed. 2. p. 22. col. 1. DC. prodr. syst.
nat. 1. p. 654.

Root tuberous, very large and uneven, and clothed with a hard scaly shell, producing very few small tubers or fibres. *Stem* none, or very short. *Leaves* very variable, covered with a powdery pubescence: lower ones oblong, simple, or lacinated; upper ones ternate, pinnatifid or pinnate, strongly nerved underneath; segments or leaflets oblong, obtuse, sinuately lobed, the upper one much the largest and most divided; margins a little waved or curled, bluntly but deeply toothed with numerous unequal teeth. *Petioles* nearly round, or slightly flattened on the upper side, thickly clothed with short villous hairs. *Stipules* short, cordate, acute, membranaceous. *Peduncles* long, several-flowered, and clothed with short spreading hairs, with a few long ones intermixed. *Involucre* of 8 or 9 unequal linear, or lanceolate, pointed bractes. *Pedicles* short, scarcely as long as the bractes. *Calyx* 5-cleft, segments unequal, lanceolate, bluntish, all reflexed or revolute. *Nectariferous tube* more than three times the length of the calyx, slender at the base, and gradually widening upwards. *Petals* 5, the two upper ones rather the

largest, of a dull greenish straw-colour, marked near the centre with two obscure purplish spots; lower petals rather darker, with two bright purple lines extending nearly all their length. *Filaments* 10, united at the base, seven bearing anthers; one of those is a flat spatula-shaped one, as in the other species of this section. *Germen* thickly clothed with a dense wool. *Style* greenish, very short and smooth. *Stigmas* 5, spreading.

The present curious species is a native of the Cape of Good Hope, from whence many roots of it have been introduced to different collections in this country within these four years. It is nearly related to *P. lobatum* and *P. triste*; but we think there can be no doubt of its being a genuine species. It varies considerably in the colour of its flowers, being either darker or lighter, much in the same manner as *P. lobatum*. Several other curious species belonging to this section are now in the extensive collection of Mr. Colvill, who has imported them from the Cape within those few years: many of them have flowered; and we intend soon to publish them, and not to let them die in oblivion, as many a fine plant is suffered to do in some collections, without ever being recorded, or even seen, except by the dunces who manage to destroy them.

Our drawing was taken from a fine plant, in the collection of Robert Henry Jenkinson, last summer.

*C. D. Smith. del.**Pub. by J. Ridgway 170 Piccadilly May. 1. 1824.**J. Watts. sc.*

PELARGONIUM Stapletoni.

Miss C. Stapleton's Stork's-bill.

P. Stapletoni, umbellis multifloris, petalis obcordatis, foliis cordatis quinquelobis undulatis obsolete crenulatis pubescentibus, stipulis persistentibus spinescentibus rectis, caule crasso carnosso, tubo nectarifero calyce quadruplo longiore.

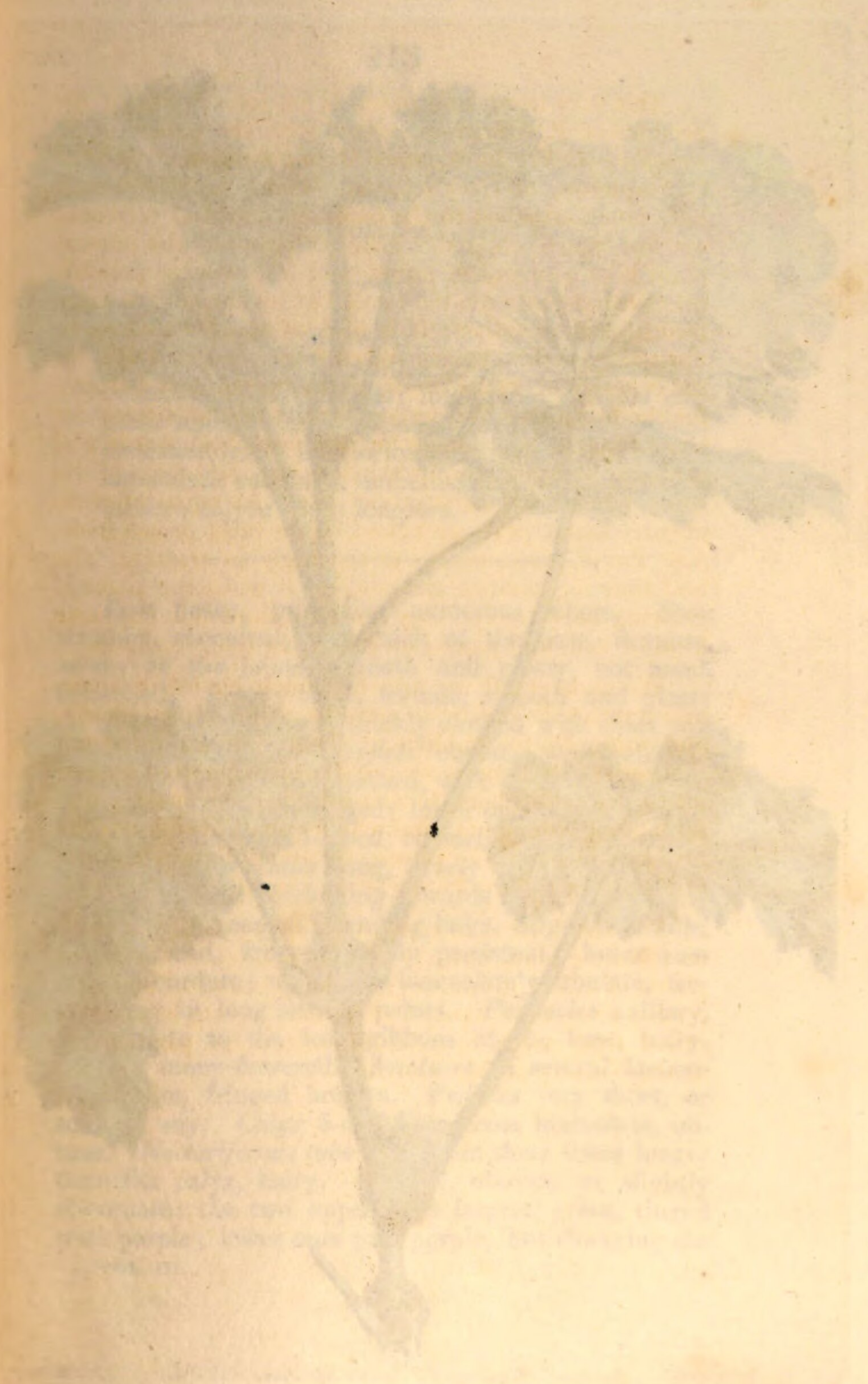
Stem shrubby, erect, thick and succulent, clothed with a hard glossy bark, not much branched. *Leaves* cordate, 5-lobed, very much undulate, shallowly notched, and clothed with a short hoary pubescence on both sides, points bent downwards. *Petioles* slightly flattened on the upper side, and rounded on the lower; swollen at the base, thickly clothed with white villous hairs. *Stipules* subulate, straight, persistent, hardening into a spine. *Scape* branching, thickly clothed with long villous hairs, as are the peduncles and calyx. *Peduncles* cylindrical, bent towards the point, many flowered. *Involucre* of several unequal bractes, some ovate, others lanceolate, acute, fringed. *Pedicles* very short. *Calyx* 5-cleft: upper segment oblong, obtuse, erect; the others narrower and reflexed. *Nectariferous tube* about four times the length of the calyx, very hairy. *Petals* 5, obcordate, the two uppermost largest, rose-coloured, white near the base; betwixt the two colours is a large bright purple spot, and below that are two or three light purple slightly branching specks: lower petals smaller, rose-coloured, with a bright red spot in the centre of each. *Filaments* 10, united at the base, six bearing anthers, besides a large spatulate-shaped one, as in the others of this section: this produces no anther. *Pollen* yellow. *Style* short, smooth. *Stigmas* 5, purple, reflexed.

919

This very handsome plant is of hybrid origin, the produce of *P. echinatum*, mixed with the pollen of *P. saepiflorens*. We have named it, in compliment to Miss C. Stapleton, of Grey's Court, Henley on Thames, a lady much attached to the GERANIACEÆ, and to whom we feel much obliged. Like its parents, the present plant is of a succulent habit, and is as near as possible intermediate between the two; but its flowers are more beautiful than either: it is also of shorter and more upright growth. It was raised from seed, in 1822, at the Nursery of Mr. Colvill, and flowered last autumn for the first time. We expect it will remain scarce for some time, as it produces but few branches; but it will probably be more readily increased by the tubers of its roots, when it attains a proper size. An equal mixture of turfy loam, peat, and sand, is the most proper compost for it, watering it but sparingly in winter. The best time for planting the cuttings is when the plant is growing most freely; they must be planted in the same kind of soil, and placed on a shelf in the greenhouse.

We understand we are very much envied in a certain quarter for raising so many beautiful hybrid plants; and more so for publishing them: but we mind not their envy, as long as we are so ably supported by our numerous subscribers, to whom we beg our most grateful acknowledgments, and who we shall always use our utmost endeavours to please, by giving figures and descriptions of the most interesting plants.

We also have it in contemplation to publish a work on the same plan, entirely on hybrid productions of the plants of different families; so many beautiful and interesting ones, both hardy and tender, having been lately raised from seeds in different collections, particularly at the Nursery of Mr. Colvill.





PELARGONIUM mutabile.

Changeable-coloured Stork's-bill.

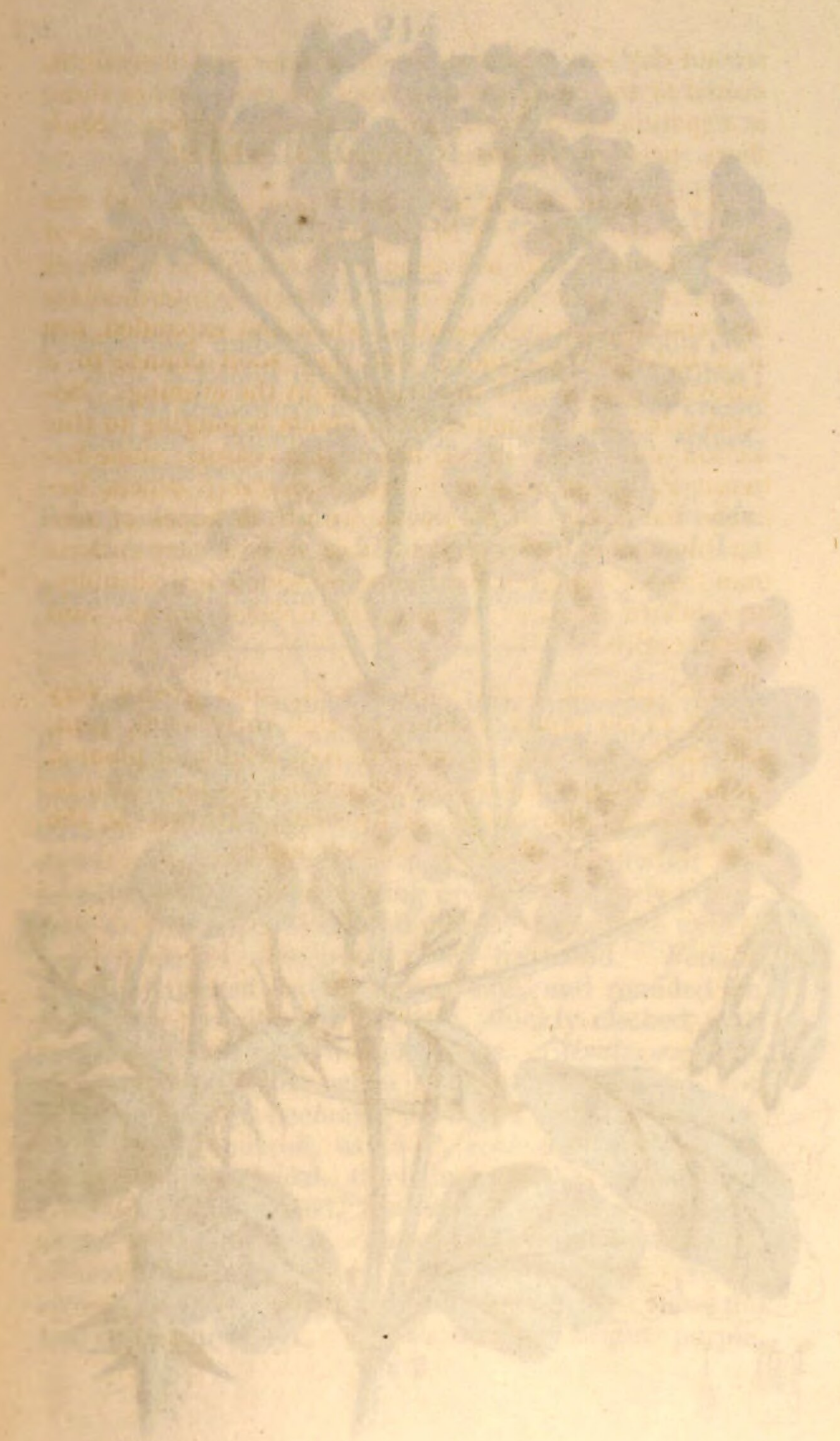
P. mutabile, caule fruticoso carnosio nodis tumidis, foliis ternatis glabris subtus pilosis; foliolis obtusis cuneatis grosse dentatis; intermedio maximo laciniato apice reflexo, stipulis longe acuminatis subsistentibus: inferioribus cordatis; superioribus lanceolatis subulatis, umbellis multifloris, tubo nectarifero calyce triplo longiore.

Root fleshy, producing numerous tubers. *Stem* shrubby, succulent, very thick at the base, flexuose, swoln at the joints, smooth and glossy, not much branched. *Leaves* large, ternate, smooth and glossy on the upper side, and thickly clothed with short soft hairs on the lower: *leaflets* obtuse, wedge-shaped, deeply but unequally toothed, with large blunt teeth and smaller ones intermixed; lower one 2-lobed; upper one much larger, 5-lobed or laciniate, points bent downwards. *Petioles* long, nearly cylindrical, swoln at the base and thickening towards the point, thickly clothed with unequal spreading hairs. *Stipules* variable, taper-pointed, fringed, nearly persistent; lower ones broadly cordate; upper ones lanceolately subulate, terminating in long slender points. *Peduncles* axillary, or opposite to the leaf, gibbous at the base, hairy. *Umbels* many-flowered. *Involucre* of several lanceolate, acute, fringed bractes. *Pedicles* very short, or scarcely any. *Calyx* 5-cleft, segments lanceolate, obtuse. *Nectariferous tube* more than three times longer than the calyx, hairy. *Petals* 5, obovate or slightly obcordate: the two upper ones largest, green, tinged with purple; lower ones pale purple, but changing the

second day to a yellowish green. *Filaments* 10, straight, united at the base, seven bearing anthers; one of those is a spatula-shaped one, with a smaller anther. *Style* short, hairy at the base. *Stigmas* 5, reflexed.

This curious plant is a hybrid production, and was raised at the nursery of Mr. Colvill, in 1822, from a seed of *P. gibbosum* that had been fertilized by the pollen of *P. particeps*, and it is as near as possible intermediate between the two: the flowers, when first expanded, are of a light purple colour, but they soon change to a yellowish green, and are fragrant in the evening. Several other curious mules from plants belonging to this section we expect to see flower this season: some between *P. gibbosum* and *P. multiradiatum*; others between the latter and *P. ardens* we are in hopes of seeing bloom before long; and also several very curious ones from *P. sanguineum*, some of which are shrubby, and others stemless; some with divided leaves, and others entire.

The present plant thrives well, and grows very strong in an equal mixture of rich turfy loam, peat, and sand. Cuttings of it strike root readily, if planted in pots and placed in the greenhouse: it may also be increased by the tubers of its roots. Drawn at the nursery of Mr. Colvill, in October last.





PELARGONIUM armatum.

Strong-spined Stork's-bill.

P. armatum, umbellis multifloris paniculatis, foliis cordatis 5-7-lobis crenatis: supra glabris nitentibus; subtus tomentosis multinerviis, caule stricto crasso carnosio, stipulis subulatis persistentibus spinescentibus rectis.

Pelargonium armatum. *Nobis supra fol. 48. in adn. Colv. catal. ed. 1. p. 21. col. 2. ed. 2. p. 22. col. 1.*

Geranium echinatum; rubrum. *Andrews, c. ic.*

Root large, branching out into numerous tubers of various shapes and sizes. *Stem* shrubby, stiff, erect, very thick, and succulent, clothed with a hard brown shining bark, and thickly beset with long straight persistent stipules; *branches* short, straight, rigid. *Leaves* cordate, 5 to 7-lobed, deeply but unequally notched, of a shining green but slightly pubescent on the upper side, and densely tomentose underneath: nerves numerous, much branched. *Petioles* slightly flattened on the upper side, and rounded on the lower; swollen at the base, thickly clothed with very short spreading, unequal hairs. *Stipules* straight, subulate, persistent; when young tapering to a fine point, afterwards becoming stiff and horny, and more blunt; not recurved, as in *P. echinatum*. *Peduncles* panicked, cylindrical, thickened at the base, hairy. *Umbels* many-flowered. *Involucre* of several lanceolate, acute, fringed bractes. *Calyx* 5-cleft; segments blunt, concave; upper one erect, the others reflexed. *Nectariferous tube* very long and slender, about four times the length of the calyx. *Petals* 5, of a bright purple,

with a dark spot in the centre of each: upper ones obcordate; lower ones narrower. *Filaments* 10, united at the base, six only bearing anthers: at the back is a large spatula-shaped sterile filament, as in the plants of this section. *Style* smooth, purple. *Stigmas* 5, reflexed.

This beautiful species, which there can be no doubt but it really is, was raised from seed received from the Cape, at the Nursery of Mr. Colvill, at the same time as *P. echinatum*. Although it has been in the collections about London so many years, it is still very little known, and continues scarce, chiefly owing, we believe, to the want of a figure to show it in perfection. The one published by Mr. Andrews being very poor and imperfect, we think it will now become a popular plant. It requires the same kind of management as *P. echinatum*, from which it differs in many respects, being a much stronger and upright plant, and its spines are longer and straight, not recurved, as in *P. echinatum*; its leaves are also more lobed, and the flowers of a very different colour.

Our drawing was taken from a fine plant covered with flowers in May last, in the collection of the Earl of Liverpool, at Coombe Wood. The best soil to grow it in is an equal mixture of turfy loam, peat, and sand, watering it very sparingly in winter. Cuttings root freely, if taken off when the plant is in a growing state. It may also be increased by the tubers from its roots.

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very soft and spongy. The
of the bark is very rough and
large, and the wood is very
the bark is very soft and spongy.

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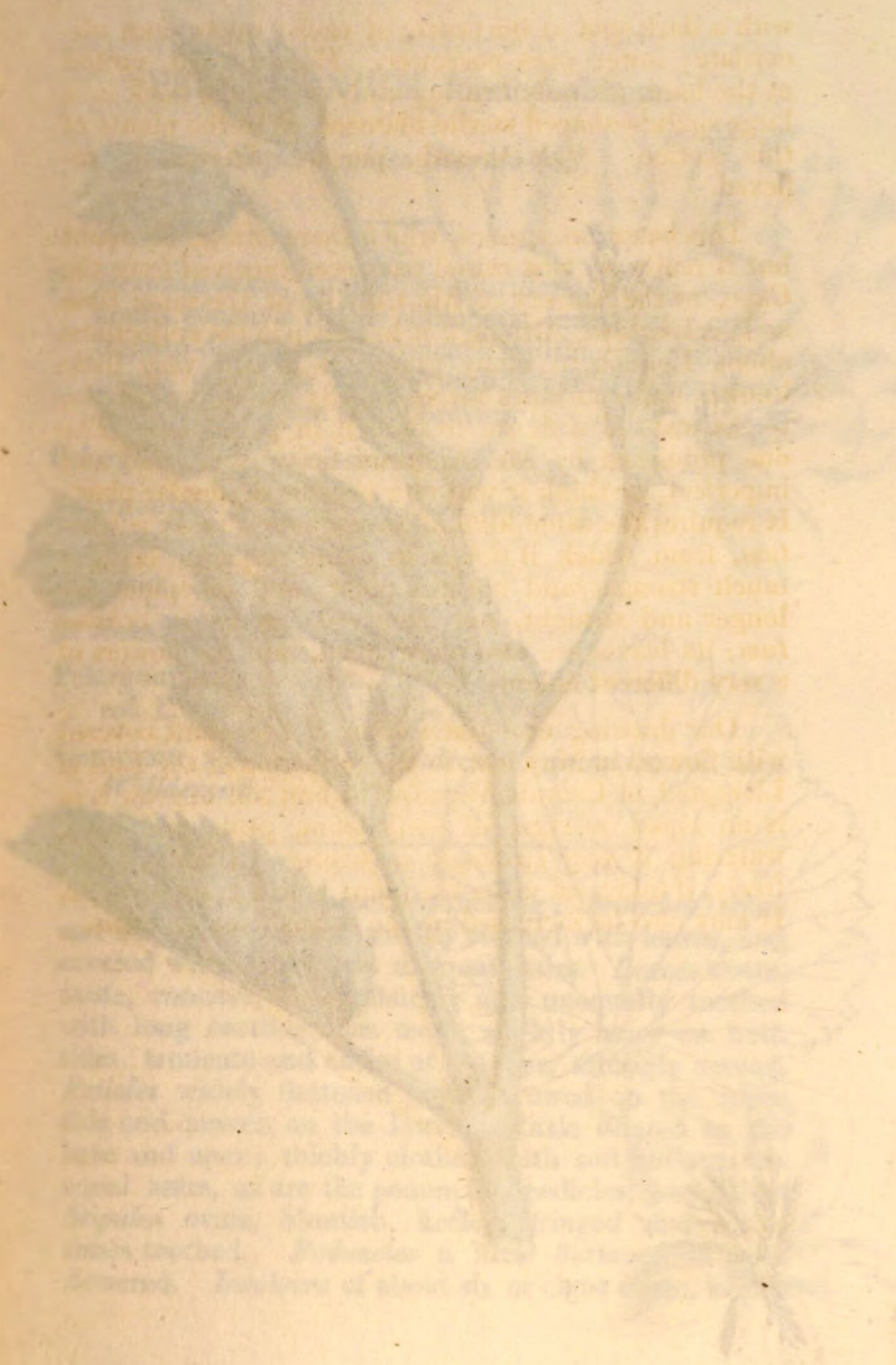
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PELARGONIUM formosissimum.

Superb white Stork's-bill.

P. formosissimum, umbellis plurifloris, foliis ovatis acutis concavis rigidis sublobatis inæqualiter cartilagineo-dentatis basi truncatis multinerviis, bracteis ovatis pedicellis subbrevioribus, tubo nectarifero brevissimo calyce triplo brevior.

Pelargonium formosissimum. *Pers. syn. 2. p. 231.*

Pelargonium formosum. *Desf. arb. 2. p. 459. Horn. supp. 75. non Andrewsii.*

α. album. Supra fig. a.

β. lineatum. Supra fig. b.

Pelargonium superbum. *Nob. in Colv. catal. p. 22. col. 1. Supra No. 33. in obs.*

Geranium speciosum. *Andrews's geran. c. ic. non Willdenovii.*

Stem shrubby, erect, branching; *branches* short and stiff, nearly erect, thickly clothed with leaves, and covered with soft villous unequal hairs. *Leaves* ovate, acute, concave, rigid, sharply and unequally toothed with long cartilaginous teeth, slightly hairy on both sides, truncate and entire at the base, strongly nerved. *Petioles* widely flattened and furrowed on the upper side and convex on the lower, a little dilated at the base and apex; thickly clothed with soft villous unequal hairs, as are the peduncles, pedicles, and calyx. *Stipules* ovate, bluntish, keeled, fringed and sometimes toothed. *Peduncles* a little flattened, 3 to 6-flowered. *Involucre* of about six or eight ovate, keeled

bractes, which are sometimes toothed and mucronate. *Pedicles* longer than the bractes or the nectariferous tube. *Calyx* 5-cleft; segments lanceolate, acute, erect. *Nectariferous tube* short, but unequal in length, sometimes wanting altogether, flattened on each side and gibbous at the base, not half the length of the calyx. *Petals* five, oblongly ovate and rounded at the points, white, or slightly tinged with pink; the two uppermost rather widest, and slightly marked at the base with reddish lines. *Filaments* 10, united at the base, seven bearing anthers. *Pollen* orange-coloured. *Ger-men* villous. *Style* of a light red, very hairy. *Stigmas* 5, red and revolute.

The present plant is an old inhabitant in our green-houses, and was raised from seed received from the Cape by Mr. Colvill several years ago. It has generally passed in our collections under the name of *P. formosum*, and *P. superbum*, and we have no doubt but it is the *P. formosum* of Desfontaines, and also the *P. formosissimum* of Persoon.. It varies with flowers more or less striated, and the petals more or less spreading; the nectariferous tube is also very variable in its length, sometimes altogether wanting.

M. Decandolle, in his *Prodromus*, has given the above as synonyms to our *P. Boyleæ*, which is a very different plant, though we believe one of its parents was the present, as we mentioned when we published it.

ERRATA.

In our last Number, folio 210, line 1 and 3, for *PELARGONIUM fuscatum*, read *PELARGONIUM fusciflorum*, there being already a *P. fuscatum* figured by Jacquin.





PELARGONIUM laxiflorum.

Spreading-umbelled Stork's-bill.

P. laxiflorum, umbellis subquinquefloris, foliis cordatis quinquelobis undulatis inæqualiter grosseque dentatis glabriusculis carnosius rigidis, tubo nectarifero calyce duplo longiore.

Stem shrubby, not much branched, rather succulent, thickly clothed with soft villous hairs, as are the petioles, peduncles, and calyx. *Leaves* cordate, thick, and fleshy, undulate, deeply divided into three lobes: upper lobe 3-lobed, lower ones 2-lobed; deeply but unequally toothed, smoothish or thinly pubescent. *Petioles* thick, slightly flattened on the upper and convex on the lower side. *Peduncles* generally 5-flowered. *Involucre* of several ovate, acute, villous bractes. *Pedicels* about the length of the bractes. *Calyx* 5-cleft: upper segment, ovate, keeled, erect; the others broadly lanceolate, reflexed. *Nectariferous tube* about double the length of the calyx. *Petals* 5, the two upper ones roundly obovate, oblique at the base, of a bright scarlet, with a purple spot in the centre, and numerous dark lines from the base that branch in various directions; lower petals ligulate, spreading. *Filaments* 10, united at the base, seven bearing anthers. *Style* flesh-coloured, hairy at the base, and smooth upwards. *Stigmas* 5, reflexed.

This fine flowering plant is of hybrid origin, and was raised by Mr. Smith from a seed of *P. ignescens*, that had been set with the pollen of one of the large growing sorts. Our drawing was taken from a fine plant, last autumn, in the collection of the Earl of Liverpool, Coombe Wood, and we believe it is at pre-

sent in no other collection: it differs from all its near relatives in its loose spreading umbels and rigid leaves. Like all the others, to which it is allied, it thrives best in a mixture of rich turfy loam, peat, and sand; and cuttings will strike root without difficulty, if planted in pots and placed on a shelf in the greenhouse.

P. longifolium, umbellae subpaniculatae, foliis cordatis
quadrifidis undulatis imbricatis *grosaeae den-*
tatis glabrescentibus *carinis rigidis* *tubo nectario*
calyce duplo longiore.

Stem shrubby, not much branched, rather succulent,
thickly clothed with soft villous hairs, as are the
petioles, peduncles, and calyx. Leaves cordate, thick,
and fleshy, undulate, deeply divided into three lobes:
upper lobe 3-lobed, lower ones 2-lobed; deeply but
unequally toothed, smoothish or thinly pubescent.
Petioles thick, slightly flattened on the upper and con-
vex on the lower side. Peduncles generally 5-flowered.
Involucres of several ovate, acute, villous bracts. Pe-
tals about the length of the bracts. Calyx 5-lobed:
upper segment ovate, beched, erect; the others broadly
lanceolate, reflexed. Nectary-tube about double
the length of the calyx. Petals 5, the two upper
ones roundly obovate, oblique at the base, of a bright
scarlet, with a purple spot in the centre, and numerous
dark lines from the base that branch in various direc-
tions; lower petals ligulate, spreading. Filaments
10, united at the base, seven bearing anthers. Style
flesh-coloured, hairy at the base, and smooth upwards.
Stigma 5, reflexed.

This fine flowering plant is of hybrid origin, and
was raised by Mr. Smith from a seed of *P. ignescens*,
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Androsace umbellata

Androsace umbellata (L.) Greene

Androsace umbellata (L.) Greene
This species is found in the
mountainous regions of the
Sierra Nevada, where it grows
in the open, rocky places.



The flowers are small, five-petaled, and
the leaves are narrow, pointed, and
arranged in a basal rosette. The plant
grows in the open, rocky places of the
mountainous regions of the Sierra Nevada.



PELARGONIUM grandidentatum.

Large-toothed Stork's-bill.

P. grandidentatum, caule fruticoso ramoso; ramis villosis, foliis inferioribus magnis flabelliformibus inæqualiter acute dentatis multinerviis basi integerimis: mediis sublobatis basi angustatis; superioribus oblongo-ovatis, stipulis cordato-lanceolatis carinatis acuminatis, umbellis multifloris, petalis laxis patentibus, tubo nectarifero calyce subæquali.

Stem shrubby, branching; branches slender, thickly clothed with long soft unequal villous hairs, as are the petioles, peduncles, and calyx. *Leaves* large, numerous and prominently nerved underneath, rigidly and sharply toothed, with long unequal taper-pointed teeth, entire near the base: upper side furrowed, smooth, and glossy; nerves and under side hairy: *lower ones* fan-shaped, about half as broad again as long; middle ones slightly lobed, narrowed to the base; those near the flowers oblong, ovate, or lanceolate, all sharply toothed. *Petioles* much flattened and furrowed on the upper side and convex on the lower, dilated at the base and apex. *Stipules* cordate or lanceolate, taper-pointed, keeled, entire, or sometimes toothed. *Umbels* many-flowered, paniced. *Peduncles* jointed at the base, more or less bent or crooked. *Involucre* of several large, ovate, acute, villous, imbricate bractes. *Pedicles* bent upwards. *Calyx* 5-cleft, segments long, lanceolate, taper-pointed, when in flower all reflexed. *Nectariferous tube* about the length of the calyx, flattened on each side and gibbous at the base. *Petals* 5, obovate, spreading; the two upper ones largest, of a pale blush, marked in the

middle with a large dark purple patch, and from it to the base are numerous crowded lines and marks; lower petals also marked with two pale red lines. *Stamens* 10, united at the base, seven bearing anthers. *Style* red, slightly hairy at the base. *Stigmas* 5, red and revolute.

This magnificent plant is of hybrid origin, and was raised, by Mr. Smith, at the Earl of Liverpool's, Coombe Wood, from a seed of *P. involucratum maximum*, that had been fertilized with the pollen of *P. triumphans*, and it is as near as possible intermediate between the two. No plant in the whole genus with which we are acquainted, makes a more magnificent appearance than the present; as it bears an abundance of blossoms, each of which continues in flower for a considerable time: it is also as hardy as any of the common sorts, thriving well in a rich light soil, or a mixture of sandy loam and peat will suit it very well. Cuttings strike root freely, if planted in pots and placed in a sheltered situation.



PELARGONIUM pulverulentum.

Powdered-leaved Stork's-bill.

P. pulverulentum, subacaule, scapo subramoso, umbellis multifloris, foliis rotundato-cordatis sublobatis crenatis pulverulento-tomentosis carnosiss, petalis superioribus paulo minoribus bimaculatis.

Pelargonium pulverulentum. *Colv. catal. ed. 2. p. 22. col. 1.*

Root tuberous, very large, and covered with a rough brown, cracked bark. *Stems* very short and rough. *Leaves* succulent, roundly cordate, obtuse, more or less lobed, unequally and bluntly notched, covered on both sides with a dense powdery pubescence, quite white when young. *Petioles* about the length of the leaves, flattened on the upper side and rounded on the lower, thickly clothed with short white hairs, as are the peduncles, calyx, and nectariferous tube. *Stipules* cordate, acute, fringed. *Scape* leafy, slightly branched. *Peduncles* long, many-flowered. *Involucre* of from six to eight broadly lanceolate taper-pointed bractes. *Pedicels* very short. *Calyx* 5-cleft, segments lanceolate, concave, all reflexed. *Nectariferous tube* more than three times longer than the calyx, flattened on each side, gradually thickening upwards. *Petals* 5, obovate, concave, the two upper ones rather smallest, yellow, with two dark spots above the middle; lower petals edged with yellow, with a dark velvety middle. *Filaments* 10, short and straight, united at the base, one of them a very large spatulate one; as in the others of the section, this bears no anther, six of the others bearing fertile anthers. *Style* short, smooth. *Stigmas* 5, fimbriate, revolute.

This curious and pretty species is a native of the Cape, from whence Mr. Colvill received several plants of it in the year 1822. It is readily distinguished from its congeners by its powdered leaves and habit altogether. Another nearly related species is in Mr. C.'s collection, with rounder smooth leaves of a greasy appearance, but that has not yet flowered.

Like the other plants of this section, the present species thrives well in an equal mixture of loam, peat, and sand, with the pots well drained; and requires very little or no water in winter when in a dormant state. It may be increased by seeds, or by the little tubers from its root.

Root tuberos, very large, and covered with a rough brown, cracked bark. *Stems* very short and rough. *Leaves* succulent, roundly cordate, obtuse, more or less lobed, rugulose, and bluntly pointed, covered on both sides with a dense powdery pubescence, pale white when young. *Petioles* about the length of the leaves, flattened on the upper side and rounded on the lower, thickly clothed with short white hairs, as are the petioles, calyx, and involucres. *Stipules* cordate, acute, fringed. *Stems* leafy, slightly branched. *Petioles* long, many-flowered. *Involucres* of from six to eight broadly lanceolate taper-pointed bracts. *Petals* very short. *Calyx* 5-lobed, segments lanceolate, concave, all reflexed. *Stamens* more than three times longer than the calyx, flattened on each side, gradually thickening upwards. *Pistil* 5, ob-ovate, concave, the two upper ones rather smallest, yellow, with two dark spots above the middle; lower petals edged with yellow, with a dark velvety middle. *Stamens* 10, short and straight, united at the base, one of them a very large spatulate one; as in the others of the section, this bears no anther, six of the others bearing fertile anthers. *Style* short, smooth. *Stigmas* 5, imbricate, revolute.

Helianthus annuus L. The common sunflower.

It is a very common plant in the fields and gardens of the United States. It is a very hardy plant and will grow in almost any soil.

The leaves are large and heart-shaped, with serrated edges. The flowers are large and yellow, with a dark brown center. The seeds are large and black.

The plant is very useful for many purposes. The seeds are used for oil and for food. The leaves are used for paper and for medicine.

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E. D. Smith. del. Pub. by J. Ridgway 170 Piccadilly July 1. 1824.

J. Watts. sc.

PELARGONIUM planifolium.

Flat-leaved Stork's-bill.

P. planifolium, caule fruticoso ramoso; ramis erectis hirsutis, foliis planis cordatis trilobis denticulatis carnosus glabriusculis, stipulis cordatis acutis subdentatis, pedunculis 3-4-floris, tubo nectarifero calyce subæquali.

Stem shrubby, erect, branching; *branches* purplish, erect, thickly clothed with short white spreading hairs, as are the petioles, peduncles, and calyx. *Leaves* flat, carnose, cordate, 3-lobed, toothed with short blunt unequal teeth, prominently nerved underneath, glossy on the upper side, but slightly hairy all over; lobes blunt. *Petioles* short, much flattened on the upper side and convex on the lower. *Stipules* cordate, taper-pointed, sometimes toothed, hairy. *Peduncles* long and slender, 3 or 4-flowered. *Involucre* of several short ovate acute bractes. *Calyx* 5-cleft; segments broadly lanceolate, acute, erect. *Nectariferous tube* about the length of the calyx, purple, flattened on both sides, gibbous at the base. *Petals* 5, obovate, the two upper ones largest, of a bright bluish lilac, with a large dark purple patch in the centre and numerous lines from the base, which branch all over the petals; lower ones narrower, of a deep blush, also marked with lines at the base. *Stamens* 10, connected at the base, seven of them bearing anthers. *Style* red, hairy all over. *Stigmas* 5, red, reflexed.

This plant is of hybrid origin, and was raised at the Nursery of Mr. Colvill, from a seed of *P. Hoareanum*, that had been fertilized by the pollen of one of the stronger growing sorts; but we cannot with any

certainly refer to the species. It is free of growth, and an abundant bloomer; and, from its distinct habit and colour, it makes a pleasing variety. It succeeds well with us in a mixture of turfy loam and peat; and cuttings root without difficulty, if planted in pots in the same kind of soil, and set on a shelf in the greenhouse.

Drawn at the Nursery of Mr. Colvill in May last.

Stem shrubby, erect, branching; branches purplish, erect, thickly clothed with short white spreading hairs, as are the petioles, peduncles, and calyx. Leaves flat, carinate, cordate, 3-lobed, toothed with short blunt unequal teeth, prominently nerved underneath, glossy on the upper side, but slightly hairy all over; lobes blunt. Petioles short, much flattened on the upper side and convex on the lower. Stipules cordate, taper-pointed, sometimes toothed, hairy. Peduncles long and slender, 3 or 4 flowered. Calyx 5-lobed; segments broadly ovate acute pointed. Ventricle two about the length of the calyx, purple, flattened on both sides, gibbous at the base. Petals 5, obovate, the two upper ones largest, of a bright bluish lilac, with a large dark purple patch in the centre and numerous lines from the base, which branch all over the petals; lower ones narrower, of a deep blue, also marked with lines at the base. Stamens 10, connected at the base, seven of them bearing anthers. Style red, hairy all over. Ovary 6, red, reflexed.

This plant is of hybrid origin, and was raised at the Nursery of Mr. Colvill, from a seed of *P. Aconitifolius*, that had been fertilized by the pollen of one of the stronger growing sorts; but we cannot with any





E. D. Smith del.

Pub. by J. Ridgway, 170 Piccadilly July 1. 1824.

J. Watts sc.

PELARGONIUM dimacriæflorum.

Dimacria-flowered Stork's-bill.

P. dimacriæflorum, subacaule, foliis laciniato-pinnatifidis pinnatisque canescenti-pubescentibus; segmentis foliolisque oppositis oblongis integris bifidisve subdentatis, petalis patentissimis obovato-spathulatis subdeflexis, tubo nectarifero calyce reflexo duplo longiore.

Root tuberous. *Stem* short and succulent. *Leaves* tufted, lacinate, pinnatifid or pinnate, clothed with a short hoary pubescence; segments or leaflets opposite, oblong, obtuse, entire, bifid or 3-toothed. *Petioles* slender, slightly flattened on the upper side, thickly clothed with short white close-pressed hairs, as are the peduncles and calyx. *Stipules* lanceolate, acute, joined to the base of the petioles. *Scape* leafy, branching, bearing several umbels of flowers. *Peduncles* cylindrical, slightly bent inwards. *Umbels* many-flowered. *Involucre* of several linearly lanceolate, acute, keeled bractes. *Calyx* 5-cleft; segments lanceolate, acute, slightly keeled, reflexed. *Nectariferous tube* nearly sessile, about twice the length of the calyx. *Petals* 5, widely spreading, deflexed, of a bright orangy scarlet; upper ones obovate, connivent at the base with spreading points, more or less marked with branching brownish purple lines; lower ones broadly spatulate, distinct, dependent. *Stamens* 10, united at the base, seven bearing anthers; two lower fertile ones much longer than the others, as in *Dimacria*. *Style* silky, purple. *Stigmas* 5, purple, reflexed.

This pretty little plant is a hybrid production, and is intermediate between *P. fulgidum* and *Dimacria as-*

tragalifolia. The colour of the flowers is nearest the former, but their spreading mode of growth resembles the latter. It was raised from seed the year before last, in the magnificent collection of Robert Henry Jenkinson, Esq. where our drawing was made last summer; and we have seen it in the same collection this spring, covered with its elegant flowers. It grows freely, like its near relatives, in a mixture of turfy loam, peat, and sand, and the pots well drained with potsherds, keeping it dry when in a dormant state. It may be increased, though slowly, by cuttings, or by the little tubers from its roots, which must be planted with their tops above the earth, or the water is liable to injure them.

Root fibrous. Stems short and succulent. Leaves tufted, lanceolate, pinnatifid or pinnate, clothed with a short hoary pubescence; segments or leaflets opposite, oblong, obtuse, entire, bilobed or 3-toothed. Petioles slender, slightly flattened on the upper side, thickly clothed with short white close-pressed hairs, as are the peduncles and calyx. Stipules lanceolate, acute, joined to the base of the petioles. Scape leafy, branching, bearing several umbels of flowers. Peduncles cylindrical, slightly bent inwards. Umbels many-flowered. Involucre of several linearly lanceolate, acute, keeled bracts. Calyx 5-lobed; segments lanceolate, acute, slightly keeled, reflexed. Petals 5, nearly sessile, about twice the length of the calyx. Petals 5, widely spreading, deflexed, of a bright orange scarlet; upper ones obovate, prominent at the base with spreading points, more or less marked with branching brownish purple lines; lower ones broadly spatulate, distinct, dependent. Stamens 10, united at the base, seven bearing anthers; two lower fertile ones much longer than the others, as in *Dianthus*. Style silky, purple. Stigmas 5; purple, reflexed.

This pretty little plant is a hybrid production, and is intermediate between *P. Wilsoni* and *Dianthus* as-





G. D. Smith. del. Pub. by J. Ridgway 170 Piccadilly Aug. 1. 1824.

J. Wallis. sc.

PELARGONIUM serratifolium.

Saw-leaved Stork's-bill.

P. serratifolium, foliis planis profunde quinquelobis glaucescentibus serratis; lobis divaricatis cuneiformibus sublobatis mucronatis, stipulis cordato-ovatis acutis denticulatis, pedunculis 3-5-floris, petalis calyce duplo longioribus, tubo nectarifero calyce duplo longiore.

Stem shrubby, erect, branching; *branches* slender, glaucous, clothed with a minute glandular pubescence. *Leaves* flat, deeply 5-lobed, slightly glaucous, roughish, and clothed with a very short dense pubescence; lobes spreading, wedge-shaped, sometimes again lobed, sharply but not deeply serrated, points mucronate. *Petioles* slender, slightly flattened on the upper and convex on the lower, pubescent. *Stipules* cordately ovate, terminating in a short point, finely toothed. *Peduncles* 3 to 5-flowered, axillary or opposite to a leaf. *Involucre* of 6 ovate, acute, slightly toothed bractes. *Pedicles* about the length of the nectariferous tube, hairy. *Calyx* 5-cleft, bearded at the point; segments lanceolate, taper-pointed; upper one broadest, erect, of a brownish purple; the others spreading or slightly reflexed. *Nectariferous tube* thickly clothed with short spreading hairs, about the length of the petals and double the length of the calyx. *Petals* 5, spreading; upper ones obovate, of a pale blush, with a bright purple patch in the centre, and numerous purple lines betwixt it and the base that are slightly branched; lower petals narrowly obovate, of a pale blush, much veined with veins of the same colour. *Filaments* 10, united at the base, seven bearing anthers. *Pollen* orange-coloured. *Style* pale flesh-coloured.

loured, hairy at the base and smooth upwards. *Stigmas* 5, purple, reflexed.

The present subject is of hybrid origin, and was raised, in the collection of R. Henry Jenkinson, Esq. from a seed of *P. amplissimum*, most probably fertilized with the pollen of *P. electum*, or some nearly related sort. It is a very desirable plant on account of its abundance of bloom, which continues in succession all the summer: it is also more hardy than *P. grandiflorum*, to which it is also allied; and succeeds well in a common greenhouse, growing freely in a rich light soil. Cuttings strike root readily, if planted in pots and placed in a sheltered situation.

Our drawing was made from a fine plant, in the collection of R. Henry Jenkinson, Esq. last summer.

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CAMPYLIA elegans.

Elegant Campylia.

C. elegans, caule fruticoso adscendente; ramis elongatis gracilibus, foliis oblongo-ellipticis lanceolatisve undulatis argute serrato-dentatis sericeo-tomentosis, stipulis acuminatis, pedunculis 4-5-floris, petalis rotundato-obovatis.

Campylia elegans. *Colv. catal. ed. 2. p. 21. col. 1.*

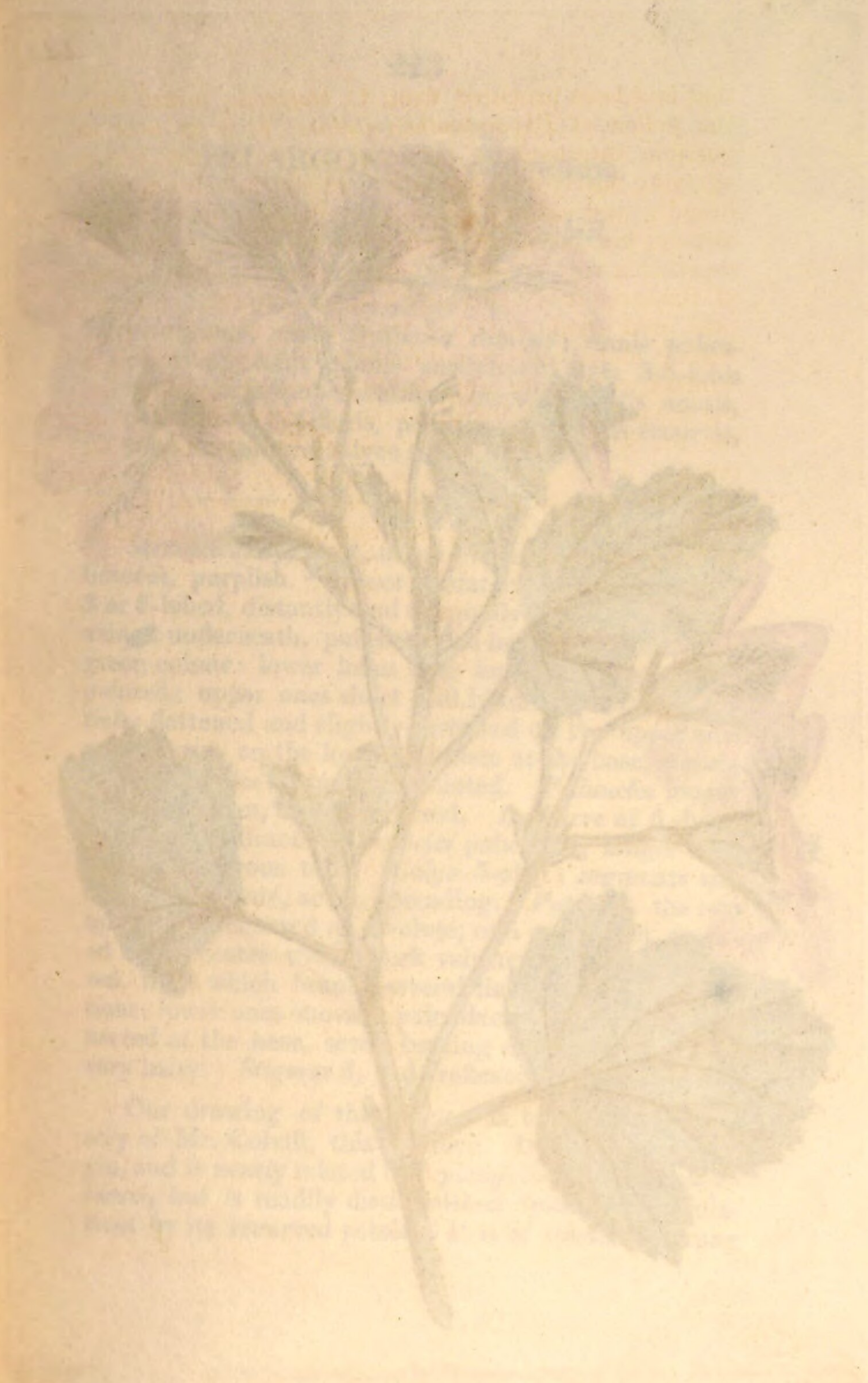
Stem shrubby, flexuose, ascending, not strong enough to support its branches without assistance; *branches* long and slender, thickly clothed with short white down. *Leaves* oblongly elliptic, bluntish, undulate, deeply but unequally serrate or toothed, densely clothed on both sides with white silky down; upper ones lanceolate, acute. *Petioles* long and slender, densely pubescent, as are the peduncles and calyx. *Stipules* lanceolate, taper-pointed. *Peduncles* slender, 4 or 5-flowered. *Involucre* of 6 lanceolate, sharp-pointed bractes. *Pedicles* cylindrical, long and slender. *Calyx* 5-cleft, segments concave, acute, strongly veined; upper one ovate, the others elliptic or lanceolate. *Petals* 5, of a pale lilac, roundly obovate, the two upper ones largest, eared and spotted at the base; above that is a white mark, edged with rose. *Stamens* 10, united at the base, five bearing anthers; two upper sterile ones recurved, and thinly clothed with long white hairs. *Pollen* orange-coloured. *Germen* densely villous. *Style* short, smooth, purple. *Stigmas* 5, about the length of the style, of the same colour, reflexed.

This handsome plant is a hybrid production, and was raised from a seed, at the Nursery of Mr. Colvill,

that had been procured from *C. blattaria*, mixed with the pollen of *Phymatanthus elatus*. It is as near as possible intermediate between the two; the leaves agreeing nearly with the latter, except in being a little broader and softer; the flowers partake more of the former, but are larger and more spreading. It is altogether a very handsome plant; and, like the others of the same tribe, succeeds well in a mixture of loam, peat, and sand, watering them freely when in a flourishing state, and giving them a dry airy situation in winter; as they are more liable to receive injury by being too much crowded with other plants, or by receiving too much moisture on their leaves, than by any other means. Cuttings will strike root freely, taken off before they get too ripe. They must be planted in pots in the same kind of soil, and may be placed on a shelf in the greenhouse.

Stems shrubby, flexuose, ascending, not strong enough to support its branches without assistance; branches long and slender, thickly clothed with short white down. Leaves oblongly elliptic, bluish, undulate, deeply but unequally serrate or toothed, densely clothed on both sides with white silky down; upper ones lanceolate, acute. Pedicels long and slender, densely pubescent, as are the peduncles and calyx. Stipules lanceolate, taper-pointed. Peduncles slender; 4 or 5-flowered. Involucres of 6 lanceolate, sharp-pointed bracts. Pedicels cylindrical, long and slender. Calyx 5-lobed, segments concave, acute, strongly veined; upper one ovate, the others elliptic or lanceolate. Petals 5, of a pale lilac, roundly obovate, the two upper ones largest, cleft and spotted at the base; above that is a white mark, edged with rose. Stamens 10, united at the base, five bearing anthers; two upper anthers ones recurved, and thickly clothed with long white hairs. Pollen orange-coloured. Germen densely villous. Style short, smooth, purple. Stigma 2, about the length of the style, of the same colour, reflexed.

This handsome plant is a hybrid production, and was raised from a seed, at the Nursery of Mr. Colvill,





B. L. Smith del. Pic by J. Ridgway 170 Piccadilly Aug. 1. 1824

J. W. H. sc.

PELARGONIUM recurvatum.

Recurved-petaled Stork's-bill.

P. recurvatum, caule fruticoso ramoso; ramis pubescentibus, foliis planis cordato-oblongis 3-5-lobis denticulatis pubescentibus, stipulis ovatis acutis, pedunculis 3-4-floris, petalis superioribus recurvis, tubo nectarifero calyce subæquali.

Stem shrubby, erect, much branched; *branches* pubescent, purplish. *Leaves* cordately oblong, bluntish, 3 or 5-lobed, distantly and unequally toothed, strongly veined underneath, pubescent on both sides, of a dark green colour: lower lobes long and spreading, rather pointed; upper ones short and bluntly rounded. *Petioles* flattened and slightly furrowed on the upper side and convex on the lower, gibbous at the base, pubescent. *Stipules* ovate, taper-pointed. *Peduncles* longer than the leaves, 3 or 4-flowered. *Involucre* of 6 short, ovate, acute bractes. *Pedicles* pubescent, longer than the nectariferous tube. *Calyx* 5-cleft; segments unequal, lanceolate, acute, spreading. *Petals* 5, the two upper ones recurved or revolute, of a rosy blush, marked in the centre with a dark velvety spot, edged with red, from which branch several lines in various directions; lower ones obovate, pale lilac. *Stamens* 10, connected at the base, seven bearing anthers. *Style* red, very hairy. *Stigmas* 5, red, reflexed.

Our drawing of this plant was taken at the Nursery of Mr. Colvill, this summer. It is of hybrid origin, and is nearly related to *P. planifolium* and *P. penicillatum*, but is readily distinguished from its near relatives by its recurved petals. It is of tolerably strong

growth, and thrives well in a mixture of turfy loam and peat, or any rich light vegetable mould, flowering all the summer: it is also as hardy as any of the genus, only requiring to be protected from the frost in winter. Cuttings of it soon strike root, if planted in pots and placed in a sheltered situation.

P. recurvum, canis fruticoso ramoso; ramis pubes-
centibus, foliis planis cordato-oblongis 3-5-lobis
denticulatis pubescentibus, stipulis ovatis acutis,
pediculis 3-4-floris, petalis subultrioribus recurvis,
tubo nectario calyce subaequali.

Stem shrubby, erect, much branched; branches pubescent, purplish. Leaves cordately oblong, bluntish, 3 or 5-lobed, distinctly and unequally toothed, strongly veined underneath, pubescent on both sides, of a dark green colour: lower lobes long and spreading, rather pointed; upper ones short and bluntly rounded. Petioles flattened and slightly furrowed on the upper side and convex on the lower, gibbous at the base, pubescent. Stipules ovate, taper-pointed. Pedicels longer than the leaves, 3 or 4-flowered. Anthers of 6 short, acute bracts. Petals pubescent, longer than the nectariferous tube. Calyx 5-lobed; segments unequal, lanceolate, acute, spreading. Petals 5, the two upper ones recurved or revolute, of a rose pink, marked in the centre with a dark velvety spot, edged with red, from which branch several lines in various directions; lower ones obovate, pale lilac. Stamens 10, connate at the base, seven bearing anthers. Style red, very hairy. Stigmas 5, red, reflexed.

Our drawing of this plant was taken at the Nursery of Mr. Colvill, this summer. It is of hybrid origin, and is nearly related to *P. planifolium* and *P. paniculatum*, but is readily distinguished from its near relatives by its recurved petals. It is of tolerably strong



E. D. Smith. del. Pub. by J. Ridgway 110 Piccadilly Aug. 1. 1824.

J. Smith. sc.

PELARGONIUM Palkii.

Mr. Palk's Stork's-bill.

P. Palkii, caule fruticoso ramoso, ramis patentibus, foliis planis cordatis trilobis dentatis : lobis distinctis patentibus rotundato-obtusis inferioribus sublobatis, stipulis cordato-ovatis ciliatis, umbellis multifloris, tubo nectarifero calyce parum longiore.

Stem shrubby, much branched; *branches* spreading, thickly clothed with long white spreading unequal hairs, as are the petioles, peduncles, bractes, and calyx. *Leaves* flat, cordate, deeply 3-lobed, toothed with large bluntly rounded teeth, clothed with short hairs on both sides, strongly nerved underneath, the nerves much branched: lobes spreading, distinct, bluntly rounded; lower ones slightly 2-lobed. *Petioles* flattened on the upper side and convex on the lower. *Stipules* cordately ovate, acute, fringed. *Peduncles* cylindrical, 4 to 8-flowered. *Involucre* of 6 or 7 bractes, some of which are ovate, others lanceolate, fringed, taper-pointed. *Pedicles* longer than the bractes, villous. *Calyx* 5-cleft; segments acute; upper one ovate, erect; the others lanceolate, reflexed. *Nectariferous tube* a little longer than the calyx, flattened on both sides, gibbous at the base. *Petals* 5, of a dark scarlet: the two upper ones broadly obovate, with an obscure spot in the centre, and from it to the base are a few dark lines that are slightly branched; lower petals oblongly ligulate, spreading. *Filaments* 10, connected at the base, seven bearing anthers, which in our specimens were all imperfect. *Style* purple, slightly hairy at the base and smooth upwards. *Stigmas* 5, purple, revolute.

This very beautiful plant is a hybrid production, and was raised at the Nursery of Mr. Colvill, from a seed of *P. Breesianum* that had been fertilized with the pollen of *P. ignescens*. Its flowers are very dark, and of a brilliant colour, which no colouring of the artist can come near to. We can scarcely imagine how so light a flower as *P. Breesianum* could produce so dark a one as the present. The same observation is applicable to *P. Kingii*, which is altogether as light, though raised from a seed of a very dark one, *P. Husseyanum*, mixed with *P. Smithii*.

The present plant, like the others to which it is related, succeeds well in a mixture of light turfy loam, peat, and sand, an equal portion of each: it will then continue to flower in succession all the summer. We have named it in compliment to the Rev. W. H. Palk, of Halldown House, near Exeter, Devon; a gentleman much attached to this family of plants, and who is in possession of a valuable collection of them.



C. D. Smith, del.

Pub. by J. Ridgway 170 Piccadilly Sep^r 1. 1824.

J. Watts sc.

PELARGONIUM Hammersleiae.

Mrs. Hammersley's Stork's-bill.

P. Hammersleiae, pedunculis paucifloris, foliis cordato-reniformibus sublobatis inæqualiter denticulatis utrinque hirsutis, petalis recurvis, tubo nectarifero calyce parum brevior.

Stem shrubby, erect, branching, clothed with a brown shining bark; *branches* slenderish, flexuose, thickly clothed with dense woolly hairs, as are the *petioles*, *peduncles*, and *calyx*. *Leaves* cordate or reniform, slightly lobed, unequally toothed with short teeth, thickly clothed on both sides with short hairs, underneath much veined. *Petioles* slender, a little flattened on the upper side and convex on the lower, widened at the base. *Stipules* short, cordate, acute, fringed. *Peduncles* cylindrical, 2 to 4-flowered. *Involucre* of 6 or 7 short, ovate, acute, fringed bractes, slightly keeled at the back. *Pedicles* longer than the nectariferous tube, bent upwards. *Calyx* 5-cleft, segments lanceolate, acute, fringed. *Nectariferous tube* scarcely as long as the calyx, flattened and keeled on each side. *Petals* 5, the two upper ones roundly obovate, oblique at the base, of a bright lilac, with a large dark velvety patch in the centre, surrounded with a shade of a reddish purple, and from the base branch several purple lines; lower petals oblongly ovate, obtuse, of a pale blush, slightly tinged in the centre, and often marked with one or two linear red spots. *Filaments* 10, united at the base, seven bearing anthers. *Pollen* orange-coloured. *Germen* villous. *Style* flesh-coloured, very hairy. *Stigmas* 5, fringed and revolute.

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This very handsome plant is of hybrid origin, and was raised, the year before last, at the Nursery of Mr. Colvill, from a seed of a hybrid plant allied to *P. pulcherrimum*, that had been fertilized with the pollen of *P. Hoareanum*. The present plant is as near as possible intermediate between the two. We have named it, in compliment to Mrs. Charles Hammersley, of Dulwich Hill, a lady much attached to the cultivation of handsome plants, and who possesses a select collection of them.

This plant, like the others to which it is related, is a free grower and an abundant bloomer, and is as hardy as any of the genus. It succeeds well in a mixture of light sandy loam and peat or decayed leaves, or any light rich vegetable soil. Cuttings of it soon strike root, if planted in pots, and set on a shelf in the greenhouse.

Our drawing was taken, at the Nursery of Mr. Colvill, last summer.





E. D. Smith. del.

Pub. by J. Ridgway 170 Piccadilly Sep. 1. 1824.

J. Walto. sc.

CICONIUM Fothergillii.

Fothergill's Ciconium.

C. Fothergillii, caule suberecto ramoso, foliis reniformibus quinquelobis crenatis zonatis, stipulis cordato-oblongis acutis ciliatis, pedunculis longissimis, umbellis multifloris, petalis obovatis venosis, tubo nectarifero calyce triplo longiore.

Ciconium Fothergillii. *Colv. catal. ed. 2. p. 21. col. 1.*

Pelargonium Fothergillii. *Colv. catal. ed. 1. p. 22. col. 3.*

Geranium Fothergillum. *Andrews's geran. c. ic.*

α. coccineum, petalis coccineis, fig. a.

β. purpureum, petalis purpureis, fig. b.

Stem shrubby, erect, branching; *branches* long, simple, thickly clothed with short white reflexed hairs, and soft down intermixed. *Leaves* rather succulent, kidney-shaped, 5-lobed, crenated with broad shallow notches, downy on both sides, and marked with a more or less faint zone or circle. *Petioles* slightly flattened on the upper side and convex on the lower, a little swollen at the base and point, thickly clothed with short white spreading hairs. *Stipules* cordately oblong or ovate, acute, fringed, their sides generally reflexed. *Peduncle* solitary, very long, opposite to the leaf, swollen at the base, thickly clothed with short white hairs that are tipped with a resinous gland. *Involucre* of numerous ovate, or broadly lanceolate, acute, undulate, fringed bractes. *Calyx* 5-cleft; segments lanceolate, acute, spreading, thickly covered with long soft hairs. *Nectariferous tube* nearly sessile, of a brown colour, about three times the length of the calyx. *Pe-*

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tals 5, obovate, much veined, their points crenulate, of a bright orangey scarlet, in variety β . inclining to purple; the three lower ones about half as large again as the upper ones. *Stamens* 10, united at the base, seven bearing anthers: *filaments* short and straight; the two upper ones very short. *Germen* villous. *Style* short, quite smooth and glossy, flesh-coloured. *Stigmas* 5, reflexed.

The present handsome subject is an old inhabitant of our greenhouses; and we suspect it is an original species, as we know of none that could have produced it by muling. It is known in collections by the name of the *Nosegay Geranium*, and also by the name that we have adopted. We do not find it recorded in the valuable *Prodromus* of M. Decandolle, or in any modern publication, except Mr. Andrews's *Geraniums*: perhaps it has been confused, with several others, under *C. zonale*, from which it differs as much as any species of one section need differ from another; and it is nearer related to *P. Bentinckianum* and *P. bracteosum* of M. Decandolle than it is to *C. zonale*. The latter plants belong also to *CICONIUM*. Perhaps *P. bracteosum* is scarcely different from *Geranium crenatum* of Andrews; and we think it not possible to be a hybrid production between *P. fulgidum* and *hybridum*.

This plant succeeds well in a rich light soil, and continues to flower nearly all the summer. Its amazing umbels of flowers exceeds all others of the family with which we are acquainted; and none, in our opinion, can surpass the scarlet variety for brilliancy of colour. Cuttings root freely, planted in pots or under hand-glasses.

Drawn, at the Nursery of Mr. Colvill, last summer.

FRANKLIN'S PRICKLY PEAR

Cylindropuntia cholla (Palm Springs)

1890

Very common in the desert, especially in the

lower part of the mountain, where it is very

common, and is one of the most characteristic

plants of the region. It is a very hardy

plant, and is able to withstand the most

severe cold, and is also very resistant to

the action of the sun. It is a very

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E. D. Smith. del.

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J. Wall's. sc.

PELARGONIUM Brightianum.

Miss Bright's Stork's-bill.

P. Brightianum, caule erecto ramoso, foliis profunde trilobis serrato-dentatis pubescentibus: lobis divaricatis sublobatis, stipulis ovato-lanceolatis acutis ciliatis, umbellis sub-4-floris, petalis undulatis imbricatis, tubo nectarifero calyce villosa duplo brevior.

Stem shrubby, much branched; *branches* spreading, thickly clothed with long spreading villous hairs, as are the petioles, peduncles, and calyx. *Leaves* flat, deeply 3-lobed, pubescent, of a pale green colour; lobes obovate or cuneate, serrately dentate, sometimes again lobed. *Petioles* flattened and furrowed on the upper side and convex on the lower. *Stipules* ovately lanceolate, acute, fringed. *Peduncles* generally 4-flowered. *Involucre* of 6 ovately lanceolate, acute, villous bractes, which are longer than the pedicles. *Pedicles* short, bent upwards. *Calyx* 5-cleft; segments lanceolate, taper-pointed, very villous, upper one largest, erect, the others reflexed. *Nectariferous tube* about half the length of the calyx. *Petals* 5, imbricate, very much undulate; two upper ones very broad, roundly obovate, white with a bright purple spot in the centre, below which are numerous purple stripes; lower petals narrowly obovate, white. *Filaments* 10, united at the base, seven bearing anthers. *Pollen* orange-coloured. *Style* pale red, hairy at the base and smooth upwards. *Stigmas* 5, of the same colour, with revolute points.

This pretty plant is a hybrid production, and was raised, last year, at the Nursery of Mr. Colvill, from a seed of *P. concinnum*, that had been fertilized by one

of the white-flowered sorts, perhaps *P. candidum* or *P. Boyleæ*. We have named it in compliment to Miss Bright, of Hamgreen, near Bristol, an admirer of handsome plants, and an encourager of botanical science.

Like the other plants to which the present is related, it succeeds well in a mixture of sandy loam and peat, or any rich light vegetable soil; flowering abundantly all the summer and till late in autumn: it is also as hardy as its near relatives, only wanting protection from frost in winter. Cuttings strike root freely, if planted in pots and set on a shelf in the greenhouse.

Stems shrubby, much branched; branches spreading, thickly clothed with long spreading villous hairs, as are the petioles, peduncles, and calyx. Leaves flat, deeply 3-lobed, pubescent, of a pale green colour; lobes ovate or cuneate, serrately dentate, sometimes again lobed. Petioles flattened and furrowed on the upper side and convex on the lower. Stipules ovately lanceolate, acute, fringed. Peduncles generally 4-flowered. Involucre of 6 ovately lanceolate, acute, villous bracts, which are longer than the pedicels. Pedicels short, bent upwards. Calyx 5-lobed; segments lanceolate, taper-pointed, very villous, upper one largest, erect, the others reflexed. Nectary-tube about half the length of the calyx. Petals 5, imbricate, very much undulate; two upper ones very broad, roundly obovate, white with a bright purple spot in the centre, below which are numerous purple stripes; lower petals narrowly obovate, white. Filaments 10, united at the base, seven bearing anthers. Pollen orange-coloured. Style pale red, hairy at the base and smooth upwards. Stigmas 5, of the same colour, with revolute points.

This pretty plant is a hybrid production, and was raised, last year, at the Nursery of Mr. Colvill, from a seed of *P. corniculatum*, that had been fertilized by one

Plant of the Coast of California





E. D. Smith. del.

Pub. by J. Ridgway 170 Piccadilly Sept. 1. 1824.

J. Watts. sc.

GERANIUM Vlassovianum.

Vlassof's Crane's-bill.

G. *Vlassovianum*, caule tereti, foliis 5-lobis; lobis ovali-acuminatis inciso-dentatis, stipulis cujusque folii in unicum apice bifidam connatis, petalis obovatis integris. DC. in mem. soc. gen. 1. p. 441. Prodr. reg. veg. 1. p. 641.

Geranium Wlassovianum. Link enum. v. 2. Colv. catal. ed. 2. p. 21. col. 3.

A hardy herbaceous *perennial*.—*Stem* erect or ascending, cylindrical, hairy. *Leaves* 5-lobed; lobes oval, acuminate, sharply cut or deeply toothed. *Stipules* linearly-lanceolate, acute, sometimes connected at the base, and terminating in two points, but generally distinct. *Peduncles* 2-flowered, long and slender, thickly clothed with procumbent, close-pressed hairs, as are the petioles, pedicles, and calyx. *Involucre* of four subulate keeled bractes. *Pedicles* long and slender, erect when in flower, but elbowed when in fruit. *Calyx* of five sepals, which are broadly lanceolate, strongly nerved, and terminated with a sharp innocuous mucro. *Petals* 5, obovate, entire, bearded at the base, about half as long again as the calyx, of a pale bluish blush, with five strong purple nerves from the base that are slightly branched. *Filaments* 10, smooth, united at the base, all bearing perfect anthers. *Style* pale, hairy. *Stigmas* 5, revolute. *Capsules* 5, inflated, very hairy.

This pretty species is a native of Siberia, and was introduced to this country in 1821, when it was raised from seed in several collections. It is quite hardy, thriving well in the open borders, and prefers a rich

light soil, growing to the height of a foot or eighteen inches, and continues to flower for a considerable time. It may be increased by dividing at the root, or by seeds, which ripen plentifully.

The plant from which our drawing and description were taken, was kindly communicated to us by Mr. William Anderson, the worthy curator of the Apothecaries' Company's garden, at Chelsea, last summer. The stipules are not all connected at the base, as described by M. Decandolle; we have more frequently found them distinct; which is also the case with *G. Wallichianum*, which also appears to be quite hardy, as we have had it and the *G. pilosum*, from New Zealand, both planted out in the open ground, where it survived well all last winter, and flowered this summer much finer than in pots. When we published the latter species, we were not certain whether it was a perennial or annual plant; we now have ascertained it to be strictly perennial, with a large fleshy root.

ascending, 2-3 feet high, branched at the base, sometimes sharply cut or deeply toothed. Stipules linear-lanceolate, acute, sometimes connected at the base, and terminating in two points, but generally distinct. Peduncles 2-flowered, long and slender, thickly clothed with prominent, close-pressed hairs, as are the petioles, pedicels, and calyx. Anthesis of four subulate keeled bracts. Pedicels long and slender, erect when in flower, but elbowed when in fruit. Calyx of five sepals, which are broadly lanceolate, strongly nerved, and terminated with a sharp innocuous mucro. Petals 5, obovate, entire, inserted at the base, about half as long again as the calyx of a pale bluish blush, with five strong purple nerves from the base that are slightly branched. Filaments 10, smooth, united at the base, all bearing perfect anthers. Style pale hairy. Stigma 5, revolute. Capsules 5, inflated, very hairy.

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D. Smith, del.

Pub. by J. Ridgway 170 Piccadilly Oct. 1. 1824.

J. Watts, sc.

PELARGONIUM Allenii.

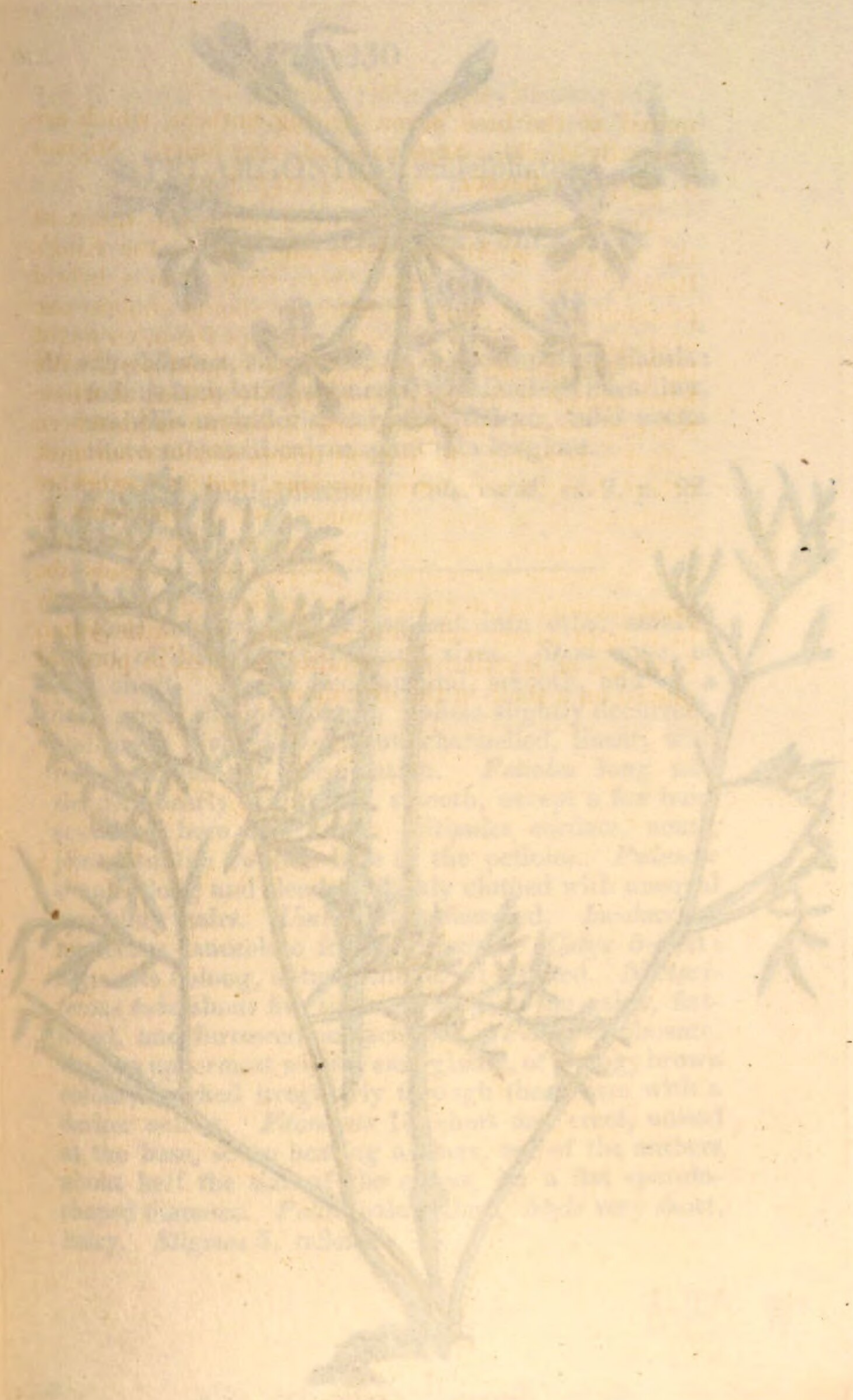
Mr. Allen's Stork's-bill.

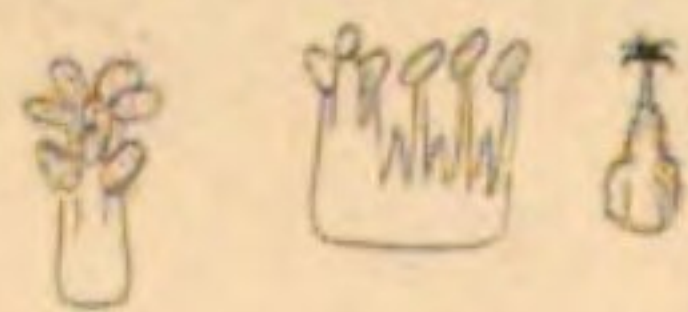
P. Allenii, caule fruticoso ramoso diffuso, foliis cordatis profunde trilobis cartilagineo-dentatis acutis utrinque hirsutis: lobo intermedio subtrilobo, stipulis lato-cordatis acutis villosis, pedunculis multifloris, calycibus reflexis, tubo nectarifero calyce subæquali.

Stem shrubby, much branched; *branches* spreading, thickly clothed with long spreading white hairs, and shorter villous ones intermixed. *Leaves* cordate, about as broad as long, deeply 3-lobed, acute, unequally toothed with long sharp cartilaginous teeth, hairy on both sides, strongly nerved underneath: upper lobe largest, generally 3-lobed; side ones mostly 2-lobed, sinuses acute. *Petioles* flattened and furrowed on the upper side, and convex on the lower, thickly clothed with spreading villous hairs, as are the peduncles, bractes, and calyx. *Stipules* broadly cordate, acute, sometimes toothed, villous. *Peduncles* cylindrical, from 5 to 8-flowered. *Involucre* of from 6 to 8, ovate, acute bractes. *Pedicles* unequal in length, longer than the bractes. *Calyx* 5-clefted; segments lanceolate, acute, densely villous, the upper one broadest, erect, the others reflexed. *Nectariferous tube* about the length of the calyx, much flattened on each side, and gibbous at the base; scarcely as long as the pedicles. *Petals* 5, of a dark scarlet, tinged with purple; the two upper ones obovate, marked in the centre with an obscure spot; between it and the base are numerous dark lines, branching in all directions; lower petals obovately oblong, of rather a lighter colour. *Filaments* 10,

united at the base, seven bearing anthers, which are generally sterile. *Style* pale red, very hairy. *Stigmas* 5, purple, reflexed.

Our drawing of this beautiful plant was taken at the Nursery of Messrs. Allen and Co. in the King's Road, where it was raised from seed; it is a hybrid production, and from its habit we should suppose one of its parents to be *P. concolor*; perhaps the other might be *P. Daveyanum*, or some nearly related sort. We have named it in compliment to Mr. Allen, at whose Nursery several other handsome hybrid sorts have been raised. In habit, the present differs widely from most others, being a very branching sort, and its flowers are produced in a kind of panicle, which continues to bloom, in succession, all the summer; this makes it a very desirable acquisition. It requires precisely the same method of treatment as its parents, growing freely in a light sandy soil, and requiring but little water. Cuttings of it strike root readily, planted in pots and placed on a shelf in the greenhouse.





E.D. Smith. del.

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J. Watts. sc.

PELARGONIUM millefoliatum.

Milfoil-leaved Stork's-bill.

P. millefoliatum, subacaule, foliis decompositis glabris: foliolis laciniatis; segmentis canaliculatis linearibus, umbellis multifloris, calycibus reflexis, tubo nectarifero subsessili calyce quintuplo longiore.

Pelargonium millefoliatum. *Colv. catal. ed. 2. p. 22. col. 1.*

Root tuberous, branching out into other smaller tubers of different shapes and sizes. *Stem* none, or very short. *Leaves* decomposed, smooth, and of a dark green shining colour; leaflets slightly decurrent, and much divided; segments channelled, linear, with rather a bluntish termination. *Petioles* long and slender, nearly cylindrical, smooth, except a few hairs scattered here and there. *Stipules* cordate, acute, joined to the swollen base of the petioles. *Peduncle* simple, long and slender, thickly clothed with unequal spreading hairs. *Umbel* many-flowered. *Involucre* of numerous lanceolate fringed bractes. *Calyx* 5-cleft; segments oblong, obtuse, ciliate, all reflexed. *Nectariferous tube* about five times as long as the calyx, flattened, and furrowed on each side. *Petals* 5, obovate, the two uppermost widest, emarginate, of a dingy brown colour, marked irregularly through the centre with a darker colour. *Filaments* 10, short and erect, united at the base, seven bearing anthers, one of the anthers about half the size of the others, on a flat spatula-shaped filament. *Pollen* pale yellow. *Style* very short, hairy. *Stigmas* 5, reflexed.

The present very distinct species is a native of the Cape, from whence many plants of it have been received, within these few years, by different collectors. We first observed it, about five years since, at the Nursery of Messrs. Loddiges, at Hackney, where it was known by the name of *P. oxalidifolium*; since that time, we have seen it in various collections, but we believe it has never been before published. It belongs to the same tribe as *P. triste*, *P. lobatum*, and many others; and, like them, expands its flowers in the evening, which are then very agreeably scented. It requires the same kind of treatment as the other tuberous-rooted species: a mixture of light turfy loam, peat, and sand, is the most proper soil for it; keeping it quite dry when in a dormant state, and fresh potting it as soon as it begins to grow; it will then flower profusely. The best method of increasing it, is by the tubers of its root, or by seeds, which ripen plentifully if some pollen be attached to the stigmas when in bloom.

Our drawing was taken at the Nursery of Mr. Collivill, last autumn; at which time it was in full flower, and may be considered as an autumn flowering species.

The present very distinct species is a native of the Cape, from whence it was introduced into Europe. It is a very common plant in the gardens of the Cape, and is also found in the mountains of the interior. It is a very hardy plant, and is able to withstand the severe frosts of the winter. It is a very useful plant, and is used for many purposes. It is a very beautiful plant, and is well adapted for the garden.

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E. D. Smith. del.

Pub by J. Ridgway 170 Piccadilly Oct. 1. 1824.

J. Watts. sc.

PELARGONIUM ardescens.

Burnished Stork's-bill.

P. ardescens, caule fruticoso ramoso; ramis erectis, foliis cordatis acutis acute et profunde lobatis incisodentatis canescentibus, umbellis plurifloris paniculatis, tubo nectarifero calyce subæquali aut paulo longiore.

Pelargonium ardescens. Colv. catal. ed. 2. p. 22. col. 2.

Stem shrubby, rather succulent, erect, branching; *branches* erect, slightly flexuose, thickly clothed with short white hairs, and a few longer ones intermixed, as are the petioles, peduncles, and calyx. *Leaves* concave, cordate, acute, trifid, acutely lobed, sharply and deeply cut and toothed, canescently pubescent; lobes spreading. *Petioles* flattened on the upper side and convex on the lower, dilated at the base. *Stipules* lanceolate, taper-pointed, broad at the base. *Flower-stalk* paniculate. *Peduncle* cylindrical, several-flowered. *Involucre* of 6-lanceolate, acute, keeled bractes. *Calyx* 5-cleft; segments keeled, acute, the upper one ovate, the others lanceolate. *Nectariferous tube* about the length, or a little longer, than the calyx, much flattened on both sides and gibbous at the base. *Petals* 5, of a bright scarlet, clouded with a dark shining crimson; upper ones roundly obovate, oblique at the base, and marked with numerous branching dark stripes. lower petals narrowly obovate, also lined near the base. *Filaments* 10, united at the base, seven bearing anthers, which are always sterile. *Style* pale coloured, slightly hairy at the base, and smooth upwards. *Stigmas* 5, purple, reflexed.

This brilliant flowered plant is of hybrid origin, and was raised in the superb collection of Robert Henry Jenkinson, Esq. from a seed of *P. fulgidum*, that had been fertilized by some other sort, which from its habit we should suspect to have been one related to *P. maculatum*; as the present plant much resembles that tribe in its mode of growth; and from the size of its leaves it must have been one of the large-leaved sorts. Its flowers are not so large as some others of the scarlet flowering sorts; but their brilliance and abundance make good that deficiency. It thrives best in a light sandy soil, like those to which it is nearest related; and great care must be taken not to over water it, as its leaves are very apt to get cankered and turn brown, if it chances to obtain too much moisture. Cuttings of it strike root freely, if planted in pots and placed on a shelf in the greenhouse.

Stem shrubby, rather succulent, erect, branching; branches erect, slightly flexuose, thickly clothed with short white hairs, and a few longer ones intermixed, as are the petioles, peduncles, and calyx. Leaves connate, cordate, acute, triid, acutely lobed, sharply and deeply cut and toothed, canescently pubescent; lobes spreading. Petioles flattened on the upper side and convex on the lower, dilated at the base. Stipules lanceolate, taper-pointed, broad at the base. Flower-stalk paniculate. Peduncles cylindrical, several-flowered. Involucres of 6-lanceolate, acute, keeled bracts. Calyx 5-lobed; segments keeled, acute, the upper one ovate, the others lanceolate. Nectary-tube about the length of a little longer, than the calyx, much flattened on both sides and gibbous at the base. Petals 5, of a bright scarlet, clouded with a dark shining crimson; upper ones roundly obovate, oblique at the base, and marked with numerous branching dark stripes. Lower petals narrowly obovate, also lined near the base. Filaments 10, united at the base, seven bearing anthers, which are always sterile. Style pale coloured, slightly hairy at the base, and smooth upwards. Stigma 5, purple, reflexed.





PELARGONIUM schizopetalum.

Divided-petaled Stork's-bill.

P. schizopetalum, caule suffruticoso carnososquamoso, foliis ternatis trifidisve oblongo-ovalibus obtusis undulatis utrinque hirsutis apice revolutis: foliolis lateralibus bilobis inciso-dentatis; intermedio maximo multilobato obtuse dentato, umbellis plurifloris longe pedunculatis, petalis subæqualibus bipartitis: segmentis multifido-laciniatis, tubo nectarifero calyce triplo longiore.

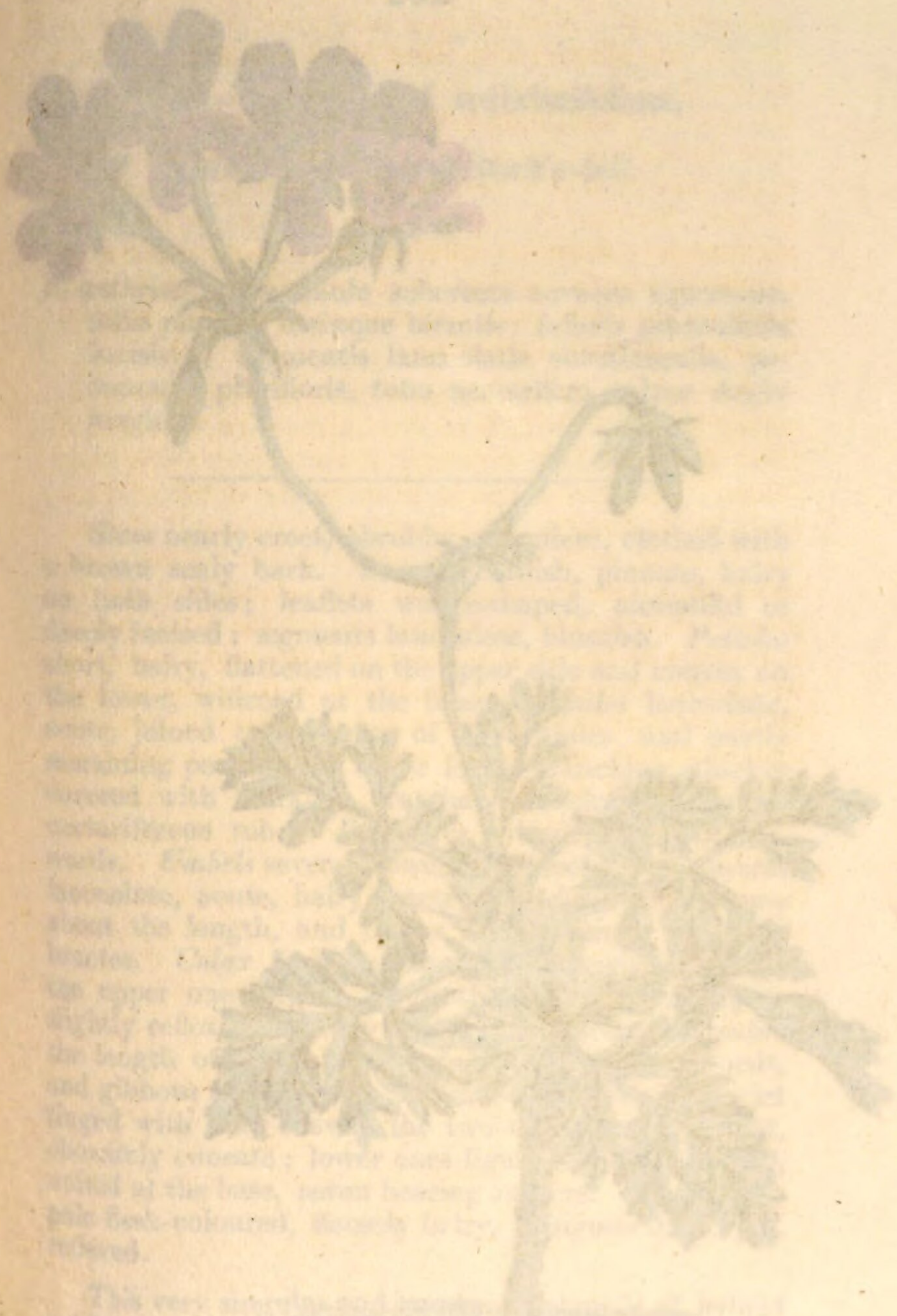
Root tuberous, branching in various directions. *Stem* short, suffruticose, rather succulent, scaly, somewhat branched; *branches* short, more or less spreading. *Leaves* about 6 inches long to 2 broad, ternate or deeply trifid, obtuse, oblongly oval, undulate, hairy on both sides, unequally toothed with blunt rounded teeth, fringed, the points revolute or much recurved, of a dark green colour; *terminal leaflet* very large, 11 to 13-lobed, the lobes overlapping each other, more or less incised, and bluntly toothed; *side leaflets* much smaller, cuneate, oblique at the base, deeply 2-lobed, incised, and bluntly toothed. *Petioles* flattened and channelled on the upper side, and rounded on the lower, widened at the base, thickly clothed with a dense pubescence and long spreading hairs intermixed. *Stipules* lanceolate, taper-pointed, fringed, and joined to the base of the petioles. *Peduncles* simple, very long and stout, densely hairy at the base, but less so upwards. *Umbel* several-flowered, spreading. *Involucre* of several narrowly lanceolate, acute, fringed bractes, all connected at the base, *Pedicles* shorter than the bractes. *Calyx* 5-cleft; segments unequal, linearly

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lanceolate, keeled, all reflexed, the upper one largest and bluntest. *Nectariferous tube* large, slightly angular, thickly clothed with short hairs, about three times longer than the calyx. *Petals* 5, nearly equal, 2-parted, the divisions multifoldly laciniate, or divided into numerous branching linear sharp-pointed segments; two upper ones of a pale yellow, lower ones of a brownish purple. *Stamens* 10, connected at the base, seven bearing anthers; *filaments* smooth, ascending; *anthers* incumbent, purple; *pollen* orange-coloured. *Style* pale, hairy on the lower part, and smooth upwards. *Stigmas* 5, flesh-coloured, spreading.

Several plants of this most curious species were received by Mr. Colvill, from the Cape, in 1821; some of them flowered last summer, when our drawing was taken. Its divided petals seem to be quite an anomaly in the family. Its nearest relatives are *P. elegans* and *P. ovale*, with which it agrees in the number and direction of its stamens, and with whom we should place it in a natural arrangement; on the other hand, it agrees with the tribe to which *P. triste* and *P. lobatum* belongs in its colour and expansion in the evening, but differs entirely in its scent, which is rather unpleasant than otherwise, and is not very unlike to the scent of some species of *Ambrosia*.

Like the other tuberous-rooted species, it succeeds well in a mixture of light turfy loam, peat, and sand; requiring but little water when in a dormant state. It may be increased, but slowly, by the tubers from its roots.



Stachys recta L.
This species is common in the mountains of the Alps, and is also found in the Pyrenees and the Apennines. It is a perennial herb, with a woody base, and a branched stem, which is covered with a dense covering of small, opposite, ovate leaves, which are serrated at the margins. The flowers are small, and are arranged in a terminal spike.

The leaves are opposite, ovate, and are serrated at the margins. The flowers are small, and are arranged in a terminal spike. The plant is a perennial herb, with a woody base, and a branched stem, which is covered with a dense covering of small, opposite, ovate leaves, which are serrated at the margins. The flowers are small, and are arranged in a terminal spike. The plant is a perennial herb, with a woody base, and a branched stem, which is covered with a dense covering of small, opposite, ovate leaves, which are serrated at the margins. The flowers are small, and are arranged in a terminal spike.

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G. D. Smith del.

Pub by J. Ridgway 170 Piccadilly Nov. 1. 1824.

J. Watts sc.

PELARGONIUM anthriscifolium.

Anthriscus-leaved Stork's-bill.

P. anthriscifolium, caule suberecto carnososquamoso, foliis pinnatis utrinque hirsutis; foliolis pinnatifidis incisive; segmentis lanceolatis obtusiusculis, pedunculis plurifloris, tubo nectarifero calyce duplo longiore.

Stem nearly erect, shrubby, succulent, clothed with a brown scaly bark. *Leaves* smallish, pinnate, hairy on both sides; leaflets wedge-shaped, pinnatifid or deeply incised; segments lanceolate, bluntish. *Petioles* short, hairy, flattened on the upper side and convex on the lower, widened at the base. *Stipules* lanceolate, acute, joined to the base of the petioles, and partly remaining persistent. *Scape* leafy, branching, thickly covered with hairs, as are the peduncles, calyx, and nectariferous tube. *Peduncles* cylindrical, bent upwards. *Umbels* several-flowered. *Involucre* of several lanceolate, acute, hairy bractes. *Pedicles* short, some about the length, and others a little longer than the bractes. *Calyx* 5-cleft; segments lanceolate, acute, the upper one largest, erect, the others spreading or slightly reflexed. *Nectariferous tube* more than double the length of the calyx, gradually widening upwards, and gibbous at the base. *Petals* 5, of a bright scarlet tinged with dark brown, the two upper ones broadest, obovately cuneate; lower ones ligulate. *Filaments* 10, united at the base, seven bearing anthers. *Style* short, pale flesh-coloured, densely hairy. *Stigmas* 5, purple, reflexed.

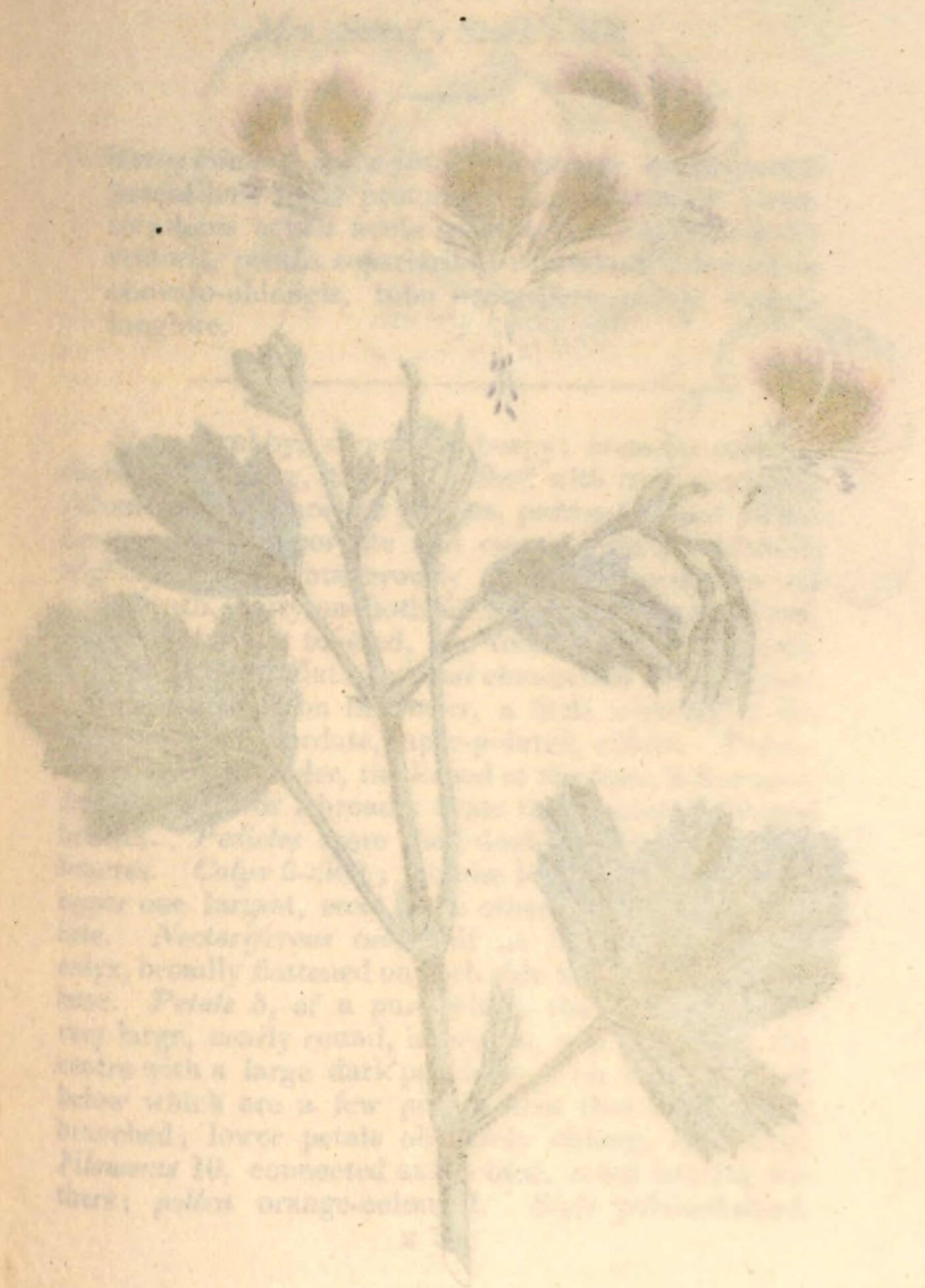
This very singular and handsome plant is of hybrid origin, and is the produce of *P. hirtum* that had been

fertilized with the pollen of *P. fulgidum*; and it is as near as possible intermediate between the two. It was raised from seed, last year, at the Nursery of Mr. Collivill, where our drawing was made in August last. It appears to be of as free growth, and as easily managed, as its relatives, succeeding well in a mixture of loam, peat, and sand; but, being of a succulent nature, it requires but little water, and the pots to be well drained with potsherds broken small, as the roots are very fond of running amongst them: it also requires a dry airy situation. Cuttings of it will strike root freely, if taken off when the plant is in a free-growing state; those must be planted in pots in the same kind of soil, and should then be placed in a warm part of the greenhouse, watering them very sparingly at first, or they will be liable to rot.

Stem nearly erect, shrubby, succulent, branched at the top. Leaves smallish, pinnate, hairy on both sides; leaflets wedge-shaped, pinnatifid or deeply incised; segments lanceolate, bluish. Petioles short, hairy, flattened on the upper side and convex on the lower, widened at the base. Stipules lanceolate, acute, joined to the base of the petioles, and partly remaining persistent. Some leafy, branching, thickly covered with hairs, as are the petioles, calyx, and nectariferous tube. Pedicels cylindrical, bent upwards. Umbels several-flowered. Flowers of several lanceolate, acute, hairy bracts. Petioles short, some about the length, and others a little longer than the bracts. Calyx 5-lobed; segments lanceolate, acute, the upper one largest, erect, the others spreading or slightly reflexed. Nectariferous tube more than double the length of the calyx, gradually widening upwards, and gibbous at the base. Petals 5, of a bright scarlet, tinged with dark brown, the two upper ones broader, obovately cuneate; lower ones ligulate. Filaments 10, united at the base, seven bearing anthers. Style short, pale flesh-coloured, densely hairy. Stigma 5, purple, reflexed.

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PELAGONUM



Pelargonium is a genus of plants in the family Geraniaceae. The name is derived from the Greek word *pelagos*, meaning 'sea', and *geronion*, meaning 'old man'. The plants are characterized by their opposite, deeply lobed leaves and their terminal, branched inflorescences. The flowers are typically five-petaled and have a long, tubular corolla. The stamens are numerous and have long, slender filaments. The pistil is composed of a single ovary and a long, slender style. The fruit is a capsule that opens by two valves.



C. D. Smith del.

Publ'd by J. Ridgway 170 Piccadilly Nov. 1. 1824.

J. Watts sc.

PELARGONIUM Mattocksianum.

Mrs. Sweet's Stork's-bill.

P. Mattocksianum caule fruticoso ramoso, ramis erecto-patentibus, foliis profunde trilobis utrinque hirsutis; lobis acutis acute serrato-dentatis, pedunculis trifloris, petalis superioribus rotundatis inferioribus obovato-oblongis, tubo nectarifero calyce sesquilongiore.

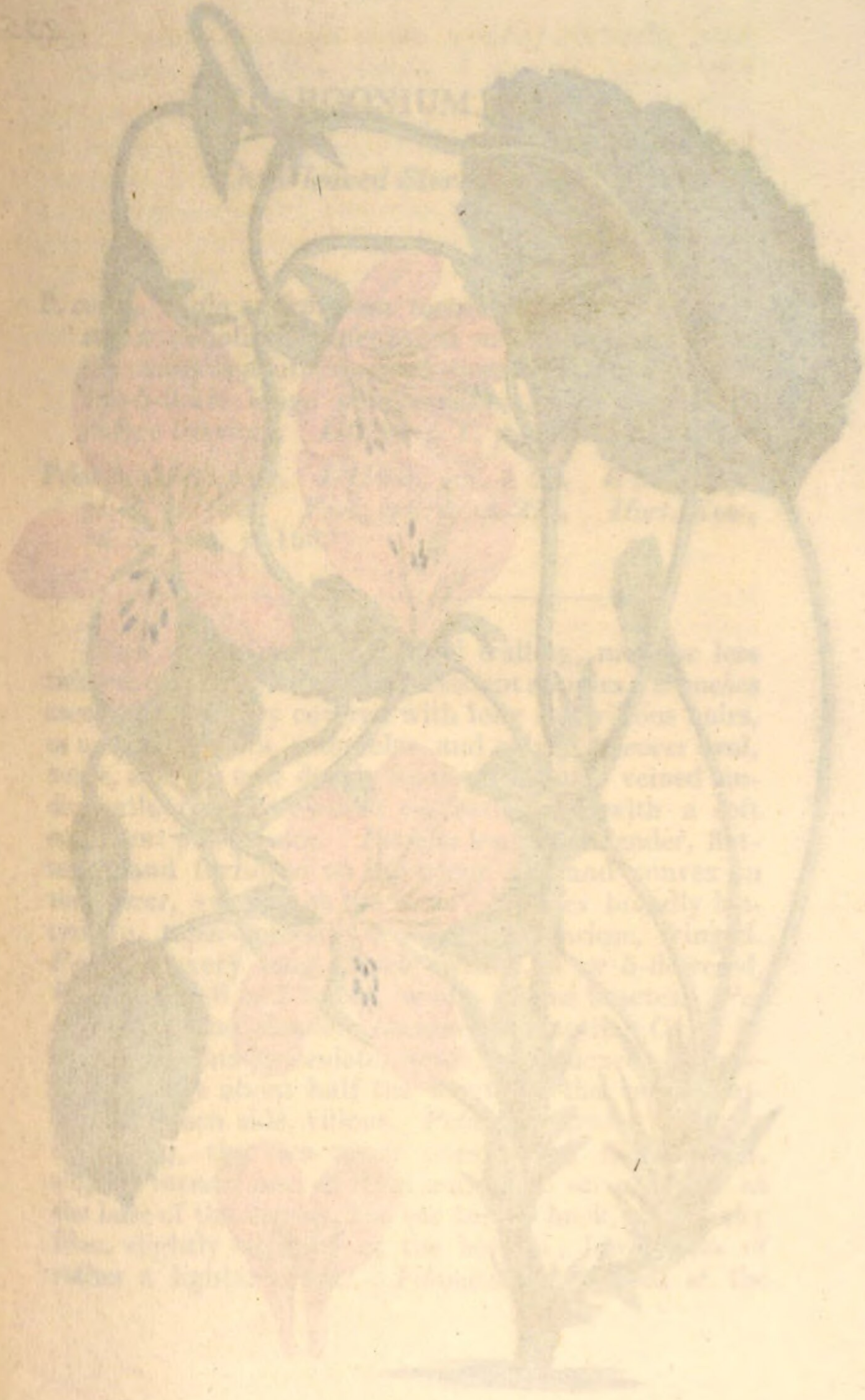
Stem shrubby, dwarf and bushy; *branches* erect or slightly spreading, thickly clothed with long spreading villous hairs, as are the petioles, peduncles, and calyx. *Leaves* between cordate and cuneate, deeply 3-lobed, slightly concave, numerous and prominently nerved underneath, hairy on both sides; lobes straight, acute, sharply sawed or toothed, the teeth unequal in length. *Petioles* slender, flattened and channelled on the upper side, and convex on the lower, a little widened at the base. *Stipules* cordate, taper-pointed, ciliate. *Peduncles* long and slender, thickened at the base, 3-flowered. *Involucre* of 6 or 7 broadly ovate taper-pointed fringed bractes. *Pedicles* more than double the length of the bractes. *Calyx* 5-cleft; laciniae lanceolate, acute, the upper one largest, erect; the others reflexed or revolute. *Nectariferous tube* half as long again as the calyx, broadly flattened on each side and gibbous at the base. *Petals* 5, of a pure white, the two upper ones very large, nearly round, imbricate, and marked in the centre with a large dark purple spot on a red ground, below which are a few purple lines that are slightly branched; lower petals obovately oblong, spreading. *Filaments* 10, connected at the base, seven bearing anthers; *pollen* orange-coloured. *Style* pale-coloured,

slightly hairy at the base and smooth upwards. *Stigmas* 5, reflexed.

This plant is also of hybrid origin, and was raised last year at the Nursery of Mr. Colvill, from a seed of *P. compar*, that had been fertilized with the pollen of *P. obscurum*, or some one nearly related. It is a very pretty growing bushy plant; but is rather more tender than its relatives, being very apt to rot off at the root, if it happens to get too much moisture: it will not, therefore, bear exposure out of doors so well as most others, particularly if the season prove wet like the present; but will succeed better in a good airy part of a greenhouse. It grows freely in a rich light soil; or a mixture of loam, peat, and sand, suits it very well. Cuttings, taken off in the young wood, root freely, but they must also be watered sparingly, or they will rot off. Our drawing was taken at Mr. Colvill's Nursery this summer.

PRONUM

Prunum





G. D. Smith del.

Pub by J. Ridgway 170 Piccadilly Nov. 1. 1824.

J. Watts sc.

PELARGONIUM ovale.

Oval-leaved Stork's-bill.

P. ovale, caule suffruticoso tortuoso debili prostrato; ramis petiolis pedunculisque molliter hispidis; foliis ovalibus acutis dentatis canescentibus, umbellis sub-5-floris longe pedunculatis, tubo nectarifero calyce brevior. *DC. prod.* 1. p. 666.

Pelargonium ovale. *L'Hérit. ger. t.* 28. *Willden. sp. pl.* 3. p. 653. *Pers. syn.* 2. p. 228. *Hort. Kew.* ed. 2. v. 4. p. 166.

Stem suffruticose, weak and trailing, more or less twisted, clothed with brown persistent stipules; *branches* ascending, thickly covered with long soft villous hairs, as are the petioles, peduncles, and calyx. *Leaves* oval, acute, sharply and deeply toothed, strongly veined underneath, densely clothed on both sides with a soft canescent pubescence. *Petioles* long and slender, flattened and furrowed on the upper side and convex on the lower, swollen at the base. *Stipules* broadly lanceolate, taper-pointed, brown and scariose, fringed. *Peduncles* very long, much twisted, 4 or 5-flowered. *Involucre* of 6 or 7 linear, acute, villous bractes. *Pedicels* long and slender, unequal in length. *Calyx* 5-cleft, segments lanceolate, acute, all reflexed. *Nectariferous tube* about half the length of the calyx, flattened on each side, villous. *Petals* 5, narrowly obovate or oblong, the two upper ones rather the shortest, slightly retuse, one of them auriculate on one side at the base of the unguis, the ear turned back, of a pinky lilac, slightly streaked at the bottom; lower ones of rather a lighter colour. *Filaments* 10, united at the

base, glandularly hairy, seven bearing anthers. *Style* very hairy. *Stigmas* 5, purple, reflexed or revolute.

This curious and very distinct species is an old inhabitant of our gardens, though now very rarely to be met with. It belongs, with *P. elegans* and *P. schizopetalum*, to our section CALLIOPSIS, the PLATYPETALA of Decandolle. Being so very different from all others, and likewise a pretty flowering species, makes it a desirable plant; and we are rather surprised that it should have been so neglected as to occasion its present scarcity. It requires precisely the same kind of treatment as the others of this section, succeeding well in a mixture of peat, loam, and sand, with the pots well drained with potsherds. Cuttings strike root without difficulty, if planted in pots in the same kind of soil, and placed on a shelf in the greenhouse.

The plant from which our drawing was taken, was kindly sent to us by the Rev. Thomas Hulse, from his collection at Englefield, in Berkshire; to whom we are also obliged for some curious hybrid varieties raised by him from seeds.



very beautiful, the flowers are
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and the leaves are small and
oval, with serrated edges.
The plant is a native of
France and is cultivated in
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RAISET

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are small and oval, with
serrated edges.



D. Smith del.

Pub. by J. Ridgway 170 Piccadilly Nov. 1. 1821.

J. Watts sc.

PELARGONIUM latilobum.

Broad-lobed Stork's-bill.

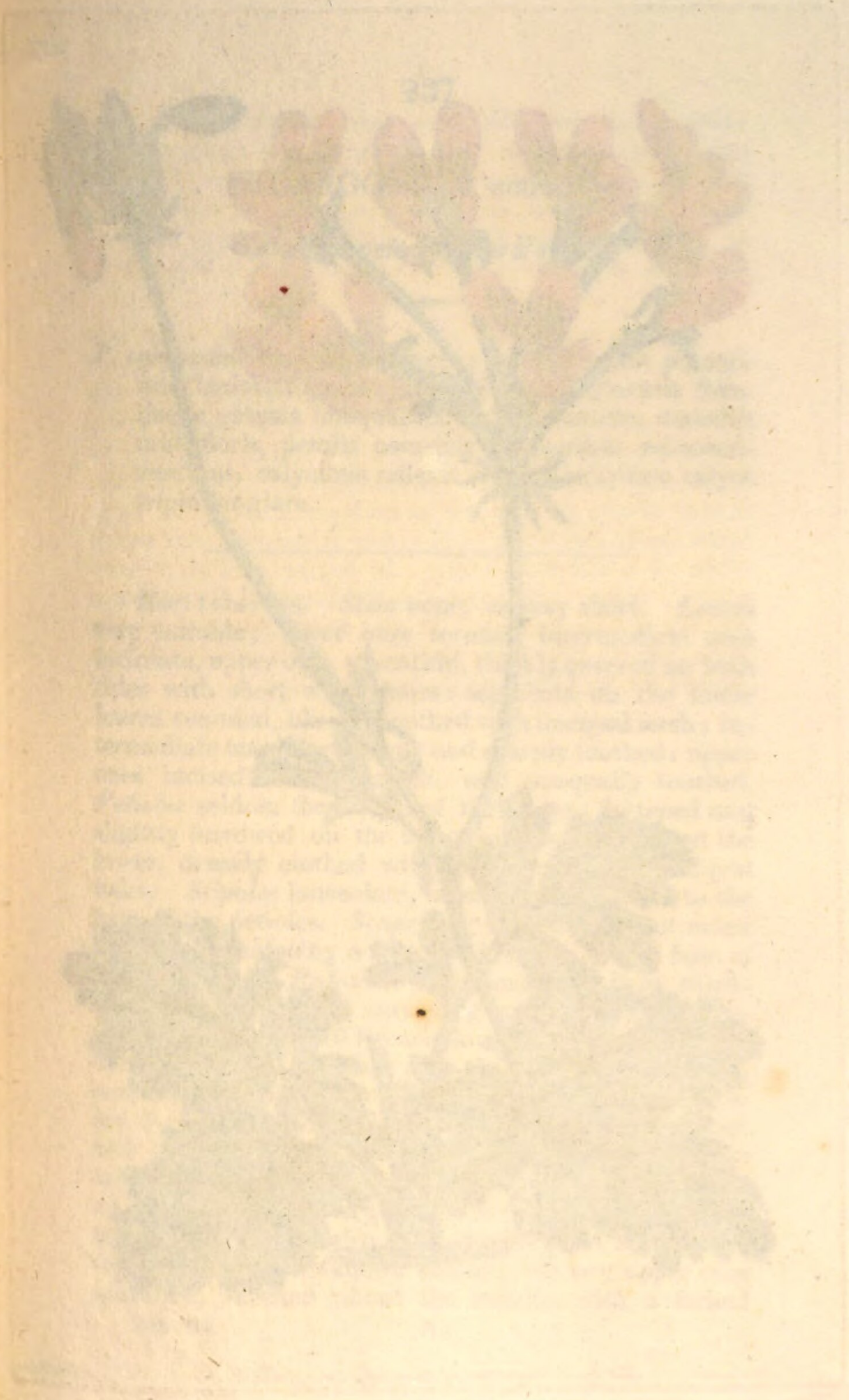
P. latilobum, foliis planis basi dilatatis 5-7-lobis obtuse dentatis molliter pubescentibus; lobis profundis rotundatis subimbricatis, stipulis oblongis acutis subdentatis, umbellis plurifloris subpaniculatis, calycibus reflexis, tubo nectarifero calyce subæquali.

Stem shrubby, erect, much branched. *Leaves* large, very broad at the base: *lower ones* deeply 7 or 9-lobed, unequally toothed with largish blunt teeth, covered on both sides with a soft pubescence; lobes broad and rounded, frequently overlapping each other; nerves numerous underneath, large and prominent, branching in all directions: *upper leaves* smaller, 5-lobed, more sharply toothed, base truncate. *Petioles* flattened and furrowed on the upper side and convex on the lower, widened upwards, where it branches off into nerves, clothed with unequal spreading hairs and short down intermixed. *Stipules* oblong or broadly lanceolate, taper-pointed, sometimes toothed, fringed, very hairy. *Umbels* several-flowered, in a kind of panicle. *Peduncles* cylindrical, thickly clothed with unequal spreading hairs, as are the bractes, calyx, and nectariferous tube. *Involucre* of 6 ovate, bluntish, mucronate, fringed bractes. *Pedicles* shorter than the bractes. *Calyx* 5-cleft, upper segment erect, oblong, acute; the others lanceolate, reflexed. *Nectariferous tube* about the length of the calyx, flattened on both sides, gibbous at the base. *Petals* 5, the two upper ones obovate, of a bright orangey scarlet, with a small dark mark in the centre, and numerous purple lines from the base, which branch in various directions; lower petals narrower, oblong.

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Filaments 10, united at the base, seven bearing anthers. *Style* pale purple, slightly hairy at the base and smooth upwards. *Stigmas* 5, purple, reflexed.

This grand plant is a hybrid production, and was raised, last year, from seed, by Mr. Smith, at the Earl of Liverpool's, Coombe Wood. We should suppose one of its parents to be *P. oblatum* or *P. eximium*, and the other *P. ignescens*. It is the strongest grower of the scarlet sorts that we have yet seen. The plant from which our drawing was taken, being about three feet high, and very strong and bushy, with an amazing panicle of flowers on the centre shoot, which gave it a very grand appearance. It requires the same kind of treatment as others of the free-growing sorts; any light rich mould, or a mixture of turfy loam, peat, and sand, will suit it very well. Cuttings strike root readily, planted in pots and placed on a shelf in the greenhouse.





PELARGONIUM concavum.

Concave-petaled Stork's-bill.

P. concavum, scapo subramoso; foliis ternatis pinnatifidis laciniatisque utrinque pilosis; segmentis foliolisque obtusis inæqualiter inciso-dentatis, umbellis multifloris, petalis concavis inferioribus subconniventibus, calycibus reflexis, tubo nectarifero calyce triplo longiore.

Root tuberous. *Stem* none, or very short. *Leaves* very variable; lower ones ternate, intermediate ones lacinate, upper ones pinnatifid, thickly covered on both sides with short white hairs: segments on the lower leaves rounded, bluntly toothed with unequal teeth; intermediate ones more deeply and sharply toothed; upper ones incised or deeply cut, and unequally toothed. *Petioles* seldom the length of the leaves, flattened and slightly furrowed on the upper side and convex on the lower, densely clothed with white spreading unequal hairs. *Stipules* lanceolate, taper-pointed, joined to the base of the petioles. *Scape* long and slender, not much branched, producing a few small leaves at the base of the peduncles. *Peduncles* long, unequally bent, thickly clothed with white spreading unequal hairs. *Involucre* of about 9 or 10 linearly lanceolate, taper-pointed, concave bractes, very hairy at the back. *Pedicles* unequal in length, seldom longer than the bractes. *Calyx* 5-cleft, segments lanceolate, acute, all reflexed, and clothed with short white hairs. *Nectariferous tube* about three times longer than the calyx, flattened on each side, a little gibbous at the base, gradually widening upwards, also clothed with short hairs. *Petals* 5, of a bright salmon colour; the two upper ones spatulate, reflexed about the middle, with a forked

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white mark near the base, from which branch numerous short purple lines; lower ones ligulate, concave, more or less connivent. *Filaments* 10, connected at the base, seven bearing anthers, which were all perfect. *Pollen* bright yellow. *Style* very hairy at the base, and smooth on the upper part. *Stigmas* 5, reflexed.

This pretty plant is of hybrid origin, and was raised at the Nursery of Mr. Colvill, in 1822, from a seed of *P. fulgidum*, that had been fertilized with the pollen of *Hoarea corydaliflora*. It is of free growth, and easily managed, if treated in the same manner as is already stated for the treatment of the tuberous-rooted sorts; planting it in an equal mixture of light loam, peat, and sand, and giving it scarcely any water when in a dormant state. It begins to flower very early in spring, and continues to bloom all the summer and till late in autumn. It may be propagated by the little tubers from the roots, or from seeds, if the flowers are fertilized by their own pollen.

THE BENTON HERBARIUM

Herbarium of the University of California



The plant is a perennial herb with a thick, horizontal rhizome. The leaves are large, deeply lobed, and have a prominent venation. The flowers are small and are arranged in a terminal cluster. The plant is native to the mountains of California.

Polygonum (L.) Pers. *sp.* p. 13. col. 13.

Ranunculus (L.) Pers. *sp.* p. 13. col. 13.

The plant is a perennial herb with a thick, horizontal rhizome. The leaves are large, deeply lobed, and have a prominent venation. The flowers are small and are arranged in a terminal cluster. The plant is native to the mountains of California. The leaves are very hairy, the flowers are yellow, and the fruit is a small, round, red berry. The plant is very common in the mountains of California.



PELARGONIUM electum.

Elected Stork's-bill.

P. electum, caule fruticoso ramosissimo; ramis gracilibus flexuosis, foliis cordatis profunde trilobis glabris serrato-dentatis: lobis cuneatis divaricatis patentibus; intermedio trilobo, stipulis cordatis acutis, pedunculis subtrifloris, tubo nectarifero scaberrimo calyce duplo longiore.

Pelargonium electum. *Colv. catal. p. 22. col. 1; edit. 2. p. 23. col. 1.*

Geranium grandiflorum; *var. parvifoliata.* *Andrews's geran. c. ic.*

Stem shrubby, very much branched; *branches* slender, flexuose, spreading in all directions, and thinly covered with small gland-like transparent hairs. *Leaves* cordate, deeply 3-lobed, sharply toothed with small unequal teeth, green and glossy, margins fringed with short hairs: *lobes* widely spreading, wedge-shaped, acute; the upper one 3-lobed, side ones 2-lobed. *Petioles* long and slender, slightly flattened on the upper side and rounded on the lower, slightly clothed with short hairs, as are the peduncles, bractes, and nectariferous tube. *Stipules* short, cordate, acute. *Peduncles* cylindrical, generally 3-flowered, swollen and jointed at the base. *Involucre* of 4 short, narrowly ovate, acute, keeled bractes. *Pedicles* longer than the bractes. *Calyx* 5-cleft, segments lanceolate, acute, very hairy; the upper one broadest, erect; the others reflexed. *Nectariferous tube* about double the length of the calyx, flattened and furrowed on each side, very scabrous. *Petals* 5, the two upper ones obovate, more

than double the length of the calyx, white sometimes tinged with blush, with two small bright purple spots in the centre, that join two purple lines from the base, which branch in various directions; lower petals spatulately linear, white. *Filaments* 10, united at the base, seven bearing anthers: *pollen* orange-coloured. *Style* pale, hairy at the base, and smooth upwards. *Stigmas* 5, reflexed.

The present plant is an old inhabitant of our gardens; but is now become rather scarce, having been neglected for the sake of novelty. It is, we suspect, of hybrid origin, and was raised from seed, many years back, at the Nursery of Mr. Colvill. We believe one of its parents to be *P. grandiflorum* or *P. amplissimum*, and the other might be *P. hermannifolium*, or one of the small-leaved species. It is more hardy and easier managed than *P. grandiflorum*, thriving well in a mixture of light sandy loam and peat, or any light rich earth; and cuttings of it strike root readily, if planted in pots and placed on a shelf in the greenhouse.

Stems shrubby, very much branched; slender, flexuose, spreading in all directions, and thinly covered with small gland-like transparent hairs. Leaves cordate, deeply 3-lobed, sharply toothed with small unequal teeth, green and glossy, margins fringed with short hairs: lobes widely spreading, wedge-shaped, acute: the upper one 3-lobed, side ones 2-lobed. Petioles long and slender, slightly flattened on the upper side and rounded on the lower, slightly clothed with short hairs, as are the petioles, branches, and nectaries. Stipules short, cordate, acute. Petioles cylindrical, generally 2-flowered, swollen and jointed at the base. Involucres of 4 short, narrowly ovate, acute, keeled bracts. Petioles longer than the bracts. Calyx 5-lobed, segments lanceolate, acute, very hairy; the upper one broadest, erect; the others reflexed. Nectary-tube about double the length of the calyx, flattened and twisted on each side, very scarious. Petals 5, the two upper ones obovate, more



PELARGONIUM vespertinum.

Evening-scented Stork's-bill.

P. vespertinum, caule fruticoso carnosso nodoso flexuoso: nodis tumidis, foliis ternatis subglaucis pubescentibus: foliolis cuneatis inciso-dentatis barbatis; intermedio petiolato 5-7-lobato, umbellis multifloris, petalis obovatis, tubo nectarifero calyce quintuplo longiore.

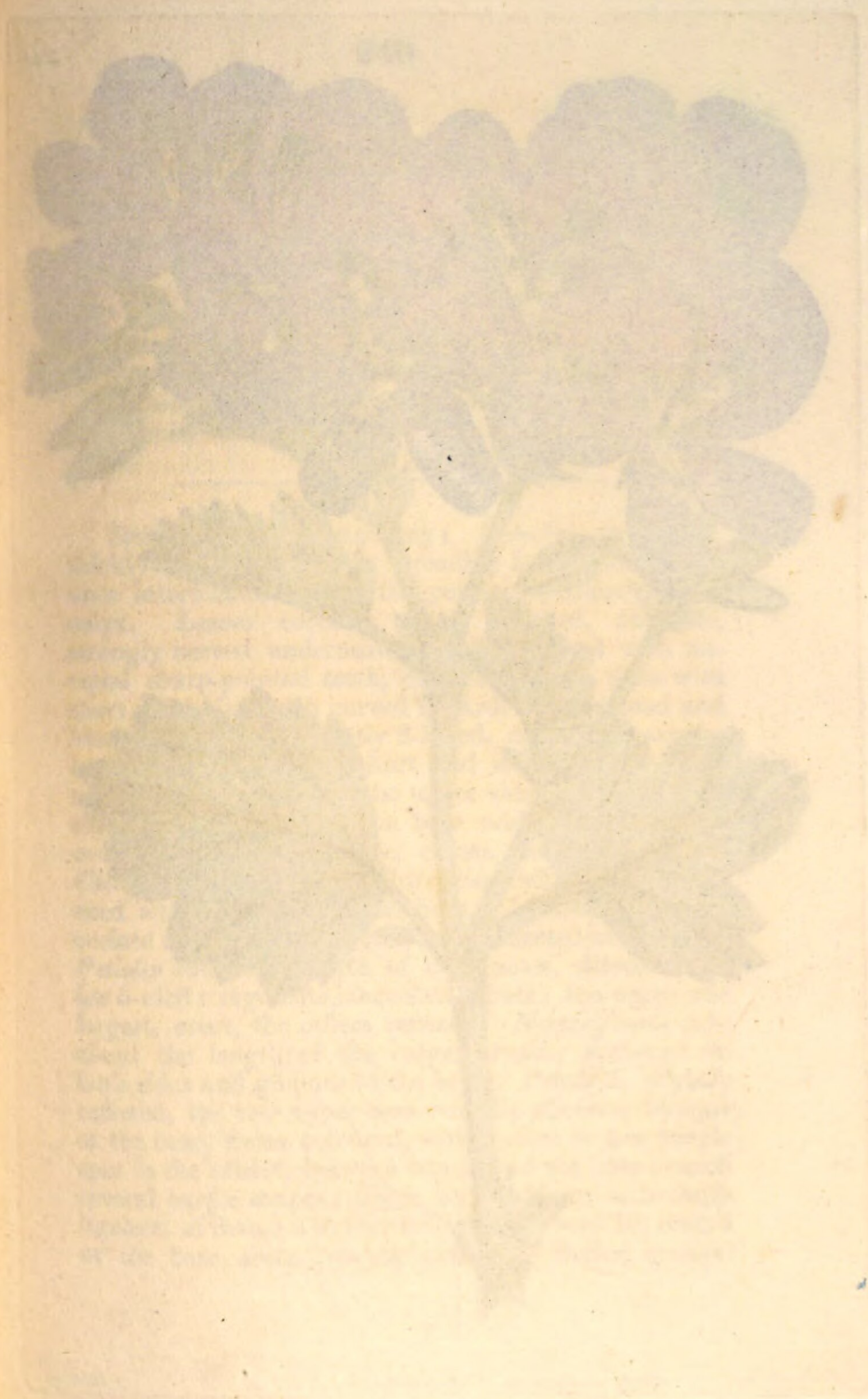
Stem shrubby, very thick and succulent, slender in places, flexuose, swollen at the joints, the young shoots thickly clothed with long spreading soft villous hairs. *Leaves* ternate, slightly glaucous, clothed on both sides with a short pubescence, margins curved inwards: *leaflets* wedge-shaped, incised, or toothed with blunt rounded unequal bearded teeth; middle one petiolate, deeply divided into 5 or 7 lobes, sinuses rounded; lower ones smaller, deeply 2-lobed. *Petioles* slightly flattened on the upper side and rounded on the lower, thinly clothed with long spreading hairs. *Stipules* lanceolate, taper-pointed, hairy, and ciliate. *Peduncles* thick, cylindrical, from 12 to 25-flowered. *Involucre* of numerous lanceolate acute bractes, all joined into one at the base and bearded at the points. *Pedicles* very short, scarcely any. *Flowers* very fragrant in the evening, but without scent during the day. *Calyx* 5-cleft, villous, segments lanceolate, bluntish, all reflexed or revolute. *Nectariferous tube* 5 or 6 times longer than the calyx, flattened on each side, gradually tapering downwards, very hairy. *Petals* 5, obovate, the two upper ones nearly obcordate, of a bright pink, lighter towards the base, where they are marked with a few small linear spots; lower petals darker, altogether

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bright pink. *Filaments* 10, straight, joined at the base, seven bearing perfect anthers, one of them a very small one on a large spatulate filament, as in several plants of this section: *pollen* pale yellow. *Germen* densely villous. *Style* short, pale, quite smooth. *Stigmas* 5, spreading.

This very handsome plant is a hybrid production, and was raised, in 1822, at the Nursery of Mr. Colvill, from a seed of *P. gibbosum*, that had been set with the pollen of *P. sæpeflorens*. It is of much stronger growth than either of its parents; and, being so very succulent, care must be taken not to overwater it. Its time of flowering is late in summer and autumn, after many of the other sorts are overblown; this makes it the more desirable, as it continues in flower a considerable time: it is also very sweet-scented in the evening, but without scent during the day. It requires precisely the same kind of treatment as the other succulent kinds. An equal mixture of turfy loam, peat, and sand, will suit it very well, watering it sparingly, particularly in winter: the pots must also be well drained with small potsherds, that the moisture may pass off readily. It is easily increased by cuttings, or from tubers of the root.

Drawn at the Nursery of Mr. Colvill, in September last.





PELARGONIUM Bakerianum.

Mrs. Jenkinson's Stork's-bill.

P. Bakerianum, foliis cordatis trilobis undulatis inæqualiter dentatis utrinque hirsutis, stipulis ovato-lanceolatis acutis, umbellis multifloris, petalis subreflexis, tubo nectarifero calyce villosa subæquali.

Stem shrubby, branching; *branches* spreading, thickly clothed with long spreading hairs and shorter ones intermixed, as are the petioles, peduncles, and calyx. *Leaves* cordate, deeply 3-lobed, undulate, strongly nerved underneath, rigidly toothed with unequal sharp-pointed teeth, clothed on both sides with short soft hairs, teeth curved inwards: lobes broad and blunt; lower ones slightly 2-lobed, upper one more or less 3-lobed. *Petioles* short and stout, broadly flattened and furrowed on the upper side and convex on the lower, widened at the base and point. *Stipules* ovate or lanceolate, acute, ciliate, margins reflexed. *Umbels* many-flowered. *Peduncles* cylindrical, thickened and transparent at the base. *Involucre* of 6 lanceolate acute keeled bractes, all connected at the base. *Petioles* about the length of the bractes, villous. *Calyx* 5-cleft: segments lanceolate, acute; the upper one largest, erect, the others reflexed. *Nectariferous tube* about the length of the calyx, broadly flattened on both sides and gibbous at the base. *Petals* 5, slightly reflexed, the two upper ones roundly obovate, oblique at the base, flame-coloured, with a more or less purple spot in the centre, between which and the base branch several purple stripes; lower petals oblong or broadly ligulate, of rather a lighter colour. *Stamens* 10, united at the base, seven bearing anthers. *Pollen* orange-

coloured. *Style* pale, hairy at the base and smooth upwards. *Stigmas* 5, purple, reflexed.

This splendid plant is of hybrid origin, and was raised from seed in the superb collection of Robert Henry Jenkinson, Esq. We suppose one of its parents to be *P. ignescens*, and the other *P. rubescens*, but cannot speak with certainty. We have named it in compliment to Mrs. Jenkinson, a great admirer of handsome plants, and an encourager of botanical science.

The delicate colour of the flowers of the present plant, rank it amongst one of the finest of the tribe: those are produced in abundance all the summer. It requires the same kind of treatment as its near relatives, growing freely in a mixture of turfy loam, peat, and sand, or any other light soil. Cuttings of it strike root readily, if planted in pots and placed on a shelf in the greenhouse.



C. D. Smith. del

Pub. by J. Ridgway 170 Piccadilly Jan. 1. 1825.

J. Walts. sc.

PELARGONIUM jonquillinum.

Jonquil-scented Stork's-bill.

P. jonquillinum, caule suffruticoso erecto crasso carnososquamoso, foliis cordatis 7-9-lobatis ternatisque canescenti-pubescentibus; segmentis foliolisque sinuato-dentatis; stipulis cordatis acuminatis, umbellis multifloris, tubo nectarifero calyce reflexo quadruplo longiore.

Root tuberous, much branched. *Stem* erect, short, and thick, succulent, scaly from the persistent stipules. *Leaves* cordate, clothed on both sides with a short white pubescence, some deeply, others shallowly 7 to 9-lobed, others ternate or pinnatifid, more or less undulate; leaflets or segments sinuate, or toothed with blunt rounded teeth. *Petioles* long and pendulous, flattened but not furrowed on the upper side, rounded on the lower, very thick at the base, densely clothed with unequal spreading white hairs, as are the peduncles, calyx, and nectariferous tube. *Stipules* cordate, taper-pointed, remaining a long time on the stem. *Scape* branching, without leaves. *Peduncles* stout, cylindrical. *Umbels* from 10 to 20-flowered. *Involucre* of numerous lanceolate, acute, fringed bractes. *Pedicles* very short. *Calyx* 5-cleft; segments unequal, obtuse, all reflexed, upper and lower ones oblong-oval, side ones oblong-lanceolate. *Nectariferous tube* about four times the length of the reflexed calyx, flattened and keeled on each side, slightly gibbous at the base. *Petals* 5, obovate, distinct, spreading, the two upper ones rather the largest, all of a diluted purple with two obscure darker spots in the centre, and light at the base. *Filaments* 10, united at the base, one of them a broad spatula-shaped one, terminated in a sharp point and bearing no anthers; six bearing anthers, which in our

specimen were all without pollen. *Style* short and pale, not hairy. *Stigmas* 5, red, reflexed.

This very handsome and curious plant is of hybrid origin, and was raised at the Nursery of Mr. Colvill, in 1822, from a seed of *P. ardens* that had been fertilized by the pollen of *P. cortusæfolium*. It has precisely the stem of the latter, and the colour of the leaves are exactly the same; but those are more divided, and have the same sort of spreading footstalks as *P. ardens*. The colour of the flowers is quite distinct from both, but partakes in an equal degree of each. Its scent is exquisite in the morning and evening, nearly resembling that of the Jonquil. It is of very free growth, and requires the same kind of treatment as the succulent and tuberous-rooted sorts; thriving well in a mixture of triffy loam, peat, and sand, watering it but sparingly in winter. The only way of propagating it, is by the tubers of its roots, as it produces scarcely any branches.

If the present plant had been received from the Cape, as well as numerous other mules that have been of late years obtained from seed, no person would have had the least doubt of its being an original species; and it is our decided opinion, that numerous plants, recorded as real species, are of hybrid origin. We cannot possibly conceive how it can be otherwise in the tropical countries, where the insects and humming-birds are continually flitting from flower to flower, and fertilizing one with the pollen of another; and we see nothing confusing in all this, as the seed from a mule plant, if fertilized by its own pollen, will produce its offspring as true as any species whatever. This we have experienced in numerous trials of our own, and have not seen the least inclination to vary; and as for hybrid plants only continuing for three or four generations, as some people suppose who have never made the experiment, we can confidently assert to the contrary, and believe that they may be muled backward and forward to any extent; and very often, if a hybrid plant is obtained from two very distant species, its anthers will be sterile, yet it will generally produce perfect seed if fertilized by some other species.



PELARGONIUM aceroides.

Maple-like Stork's-bill.

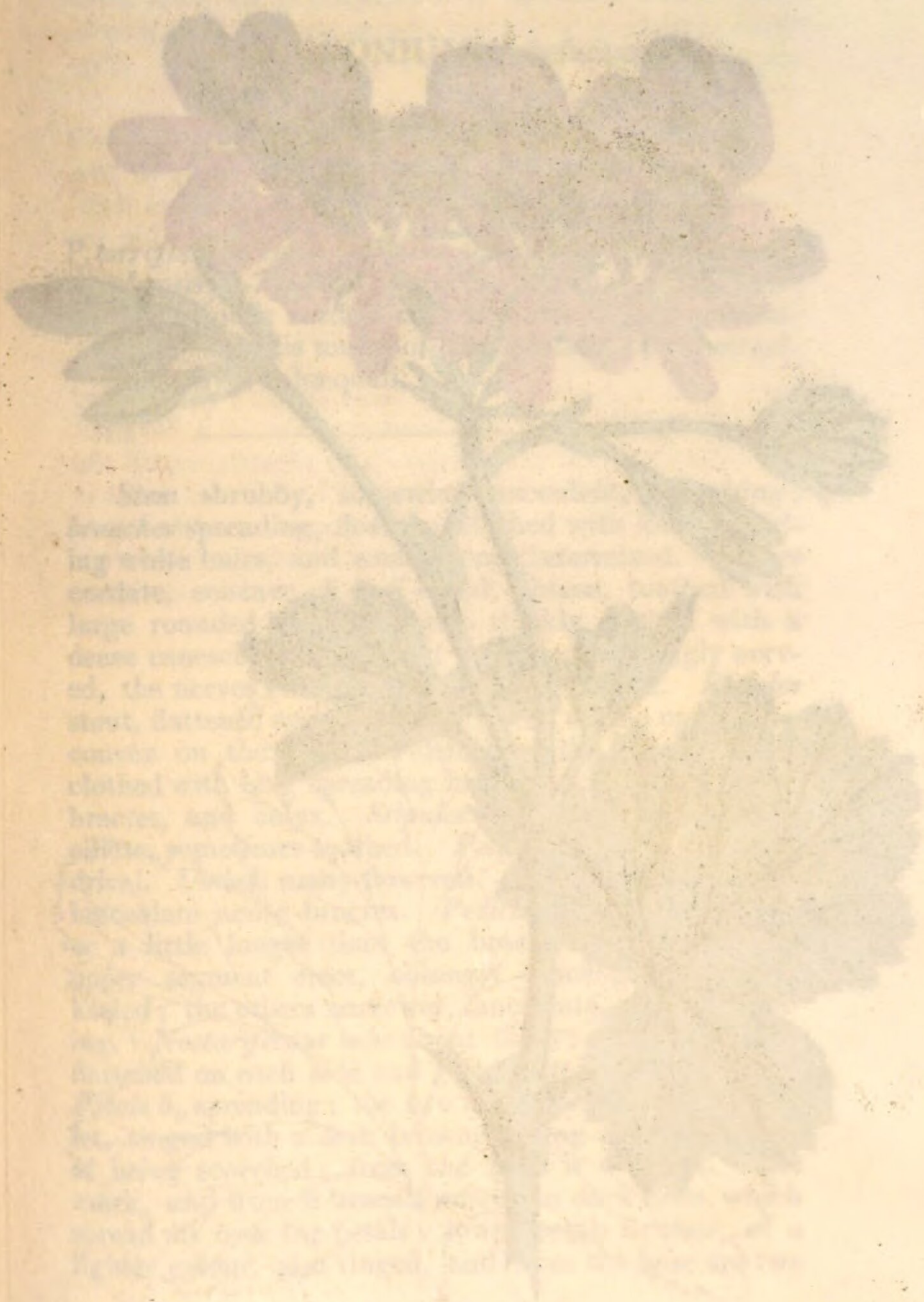
P. aceroides, caule fruticoso ramoso ; ramis patentibus, foliis rigidis cordatis 5-7-lobis acutis cartilagineo-dentatis undulatis pubescentibus subtus multinerviis, stipulis cordato-lanceolatis acuminatis subdentatis, pedunculis plurifloris, petalis venosissimis, tubo nectarifero calyce acuminato subæquali.

Stem shrubby, much branched; *branches* short, spreading, thickly clothed with long spreading villous hairs, as are the petioles, stipules, peduncles, and calyx. *Leaves* rigid, cordate, 5 or 7-lobed, acute, sharply toothed with brown cartilaginous teeth, pubescent on both sides, underneath prominently nerved, the nerves branching in all directions, margins undulate. *Petioles* short, broadly flattened and furrowed on the upper side and convex on the lower, broadest at the base. *Stipules* cordately lanceolate, taper-pointed, often toothed. *Peduncles* cylindrical, several-flowered. *Involucre* of about six ovate, taper-pointed, keeled bractes. *Pedicles* longer than the bractes, villous. *Calyx* 5-cleft; segments long, lanceolate, taper-pointed, of a brownish purple; upper one erect, the others spreading. *Nectariferous tube* about the length of the calyx, of the same colour. *Petals* 5, the two upper ones roundly obovate, oblique at the base, of a blush-colour, with a faint purple spot in the centre; between it and the base are numerous reddish purple lines which branch all over the petals: lower ones oval, of a lighter colour, also slightly marked with reddish veins. *Filaments* 10, connected at the base, seven bearing anthers. *Style* purple, quite smooth. *Stigmas* 5, purple, reflexed.

Our drawing was taken from a fine plant in the collection of Robert Henry Jenkinson, Esq. last spring. It is of hybrid origin: and we believe one of its parents to be *P. floridum*, and the other *P. lineatum*, or perhaps *P. striatum*. It is a very desirable plant, being as hardy as any of the tribe, and a free bloomer, growing readily in a mixture of sandy loam and peat, or any rich light soil. Cuttings of it strike root readily, if planted in pots and placed in a sheltered situation.

P. acrocarpum, caule fruticoso ramoso; ramis patentibus, foliis rigidis cordatis 5-7-lobis acutis cartilagineo-dentatis undulatis pubescentibus subtus multinerviis, stipulis cordato-lanceolatis acuminate subtubatis, pedunculis plurifloris, petalis venosis, tubo nectarifero calyce acuminate subapicali.

Stem shrubby, much branched; branches short, spreading, thickly clothed with long spreading villous hairs, as are the petioles, stipules, peduncles, and calyx. Leaves rigid, cordate, 5 or 7-lobed, acute, sharply toothed with brown cartilaginous teeth, pubescent on both sides, underneath prominently nerved, the nerves branching in all directions, margins undulate. Petioles short, broadly flattened and furrowed on the upper side and convex on the lower, broadest at the base. Stipules cordately lanceolate, taper-pointed, often toothed. Peduncles cylindrical, several-flowered. Anthers of about six ovaries, taper-pointed, keeled bristles. Petals longer than the bristles, villous. Calyx 5-lobed; segments long, lanceolate, taper-pointed, of a brownish purple; upper one erect, the others spreading. Nectary two about the length of the calyx, of the same colour. Petals 5, the two upper ones roundly obovate, oblique at the base, of a blush-colour, with a faint purple spot in the centre; between it and the base are numerous reddish purple lines which branch all over the petals: lower ones oval, of a lighter colour, also slightly marked with reddish veins. Filaments 10, connected at the base, seven bearing anthers. Style purple, quite smooth. Stigmas 5, purple, reflexed.



Shrub, 10-15 feet high, with a spreading habit. The leaves are large, rounded, and lobed, with a prominent midrib and secondary veins. The flowers are small, light-colored, and arranged in a dense, terminal cluster. The fruit is a small, round, fleshy berry, which is green when young and turns red or black when ripe. The plant is native to the mountains of the Himalayas, where it is found at altitudes of 10,000 to 15,000 feet. It is a common species in the region, and is often cultivated in gardens and parks. The plant is a member of the family Rosaceae, and is closely related to the species *Rosa* and *Spiraea*.



PELARGONIUM torrefactum.

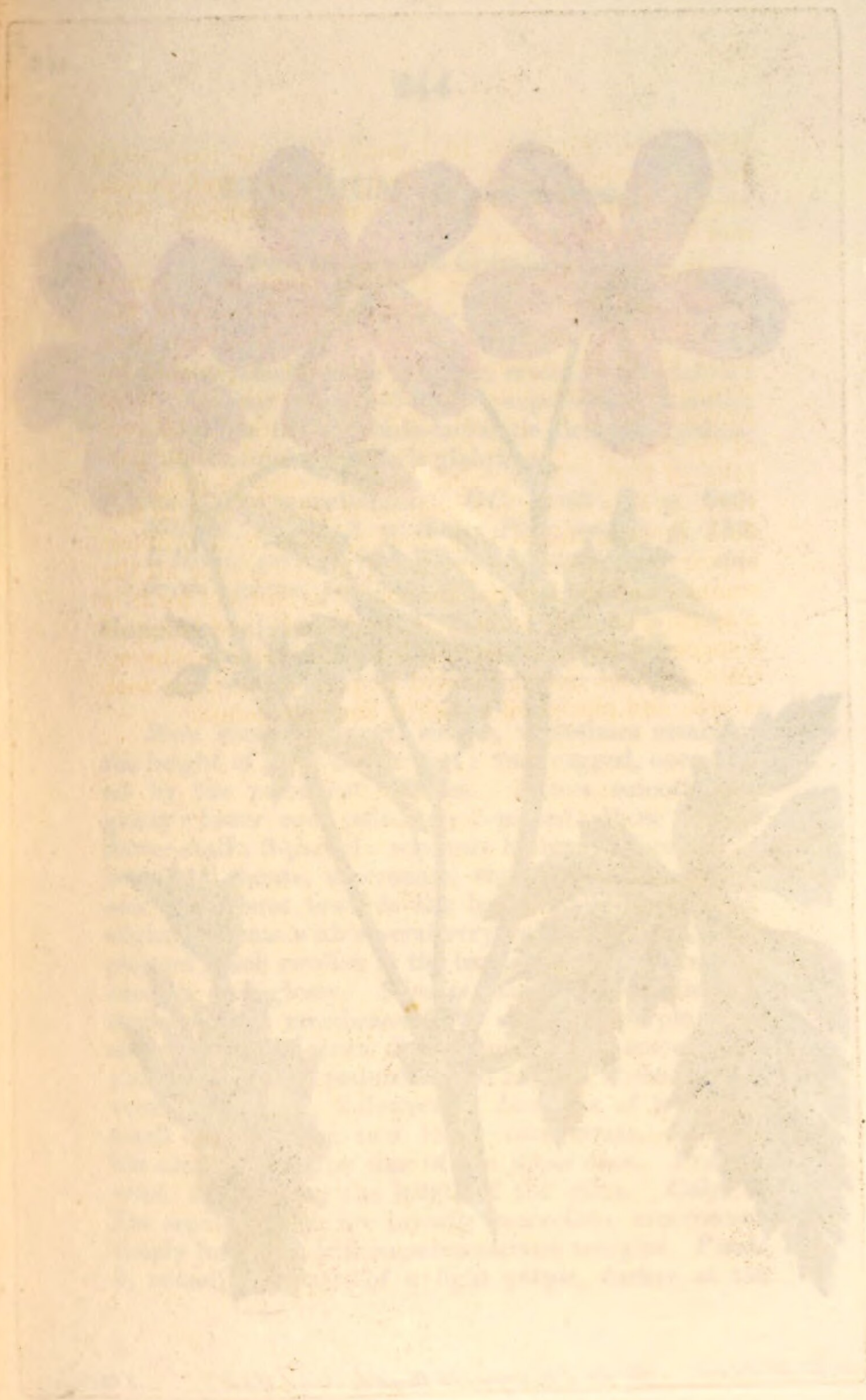
Burnt-petaled Stork's-bill.

P. torrefactum, caule fruticoso subcarnoso, foliis cordatis obtusis 5-7-lobatis dentatis canescenti-pubescentibus, stipulis cordato-ovatis acutis ciliatis subdentatis, umbellis multifloris paniculatis, tubo nectarifero calyce subæquali.

Stem shrubby, somewhat succulent, branching; *branches* spreading, flexuose, clothed with long spreading white hairs, and smaller ones intermixed. *Leaves* cordate, concave, 5 or 7-lobed, obtuse, toothed with large rounded unequal teeth, thickly clothed with a dense canescent pubescence; underneath strongly nerved, the nerves clothed with long white hairs. *Petioles* stout, flattened and slightly furrowed on the upper side, convex on the lower, widened at the base, thickly clothed with long spreading hairs, as are the peduncles, bractes, and calyx. *Stipules* cordately ovate, acute, ciliate, sometimes toothed. *Peduncles* panicled, cylindrical. *Umbels* many-flowered. *Involucre* of six broad lanceolate acute bractes. *Pedicles* about the length, or a little longer than the bractes. *Calyx* 5-cleft; upper segment erect, oblongly lanceolate, bluntish, keeled; the others narrower, lanceolate, acute, spreading. *Nectariferous tube* about the length of the calyx, flattened on each side and gibbous at the base, villous. *Petals* 5, spreading; the two upper ones obovate, scarlet, tinged with a dark brown, having the appearance of being scorched; from the base is a forked white mark, and from it branch numerous dark lines, which spread all over the petals: lower petals ligulate, of a lighter colour, also tinged, and from the base are two

dark veins. *Filaments* 10, connected at the base, seven bearing anthers, which are always sterile. *Style* purple, slightly hairy at the base and smooth upwards. *Stigmas* 5, purple, reflexed.

This very fine strong-growing plant is of hybrid origin, and was raised, in 1822, at the Nursery of Mr. Colvill, from a seed of *P. fulgidum* that had been fertilized by *P. Husseyanum*. It is as near as possible intermediate, possessing the strong growth and large leaves of the latter parent, with the succulent substance of the former; and its flowers in size and colour partake of both. It certainly makes a very pleasing variety, as it is so distinct from most others; and its fine dark flowers, mixed with scarlet, gives it a brilliant appearance: those are produced in abundance all the summer and till late in autumn. The best soil for it is a mixture of turfy loam, peat, and sand; and being of a succulent habit, it requires but little water in winter. Cuttings root freely, planted in pots in the same sort of soil, and placed on a shelf in the greenhouse.





C. D. Smith. del.

Pub by J. Ridgway 170 Piccadilly Jan. 1. 1824.

J. Maitland sc.

GERANIUM *anemonefolium*.*Anemone-leaved Crane's-bill.*

G. anemonefolium, caule fruticoso erecto, foliis glabris : inferioribus palmato-5-sectis; superioribus 3-sectis: segmentis bipinnatifido-laciniatis dentatis, pedunculis fasciculatis bifloris glabris.

Geranium anemonefolium. DC. *prodr.* 1. p. 640.

Willden. sp. pl. 3. p. 698. *Pers. syn.* 2. p. 234.

L'Hérit. ger. t. 36. *Botan. magaz.* 206. *Andrews's geran. f.* 1.

Geranium palmatum. Cav. *diss.* 4. t. 84. f. 2.

Stem shrubby, erect, simple, sometimes attaining the height of three or four feet; very rugged, occasioned by the persistent stipules. *Leaves* smooth and glossy: lower ones palmately 5-parted; those on the flower-stalks 3-parted: *segments* bipinnatifid or deeply laciniated, acute, mucronate, sharply toothed. *Petioles* long, bent towards the leaf, nearly cylindrical, slightly sulcate with several very shallow furrows, purple and much swollen at the base, and green upwards, smooth and glossy. *Stipules* large, ovate, bluntish, their margins membranaceous, of a pale purple, persistent. *Flower-stems* dichotomous, quite smooth and glossy, as are the peduncles and calyx. *Peduncles* several, fasciculate, 2-flowered. *Involucre* of four very small bractes, the two lower ones ovate, concave, bluntish, double the size of the upper ones. *Pedicles* erect, about twice the length of the calyx. *Calyx* of five sepals, which are broadly lanceolate, mucronate, deeply furrowed, with membranaceous margins. *Petals* 5, roundly obovate, of a light purple, darker at the

base, about twice the length of the sepals. *Stamens* 10, all fertile. *Germen* smooth. *Style* red, glandularly hairy near the base, and smooth upwards. *Stigmas* 5, reflexed or revolute.

This curious plant is a native of Madeira, and an old inhabitant of our gardens. It may be considered a very hardy greenhouse plant, as in mild winters it will survive all the year in the open air; and I am informed that it is cultivated in the open ground at the Isle of Wight, and in some parts of Devonshire. It makes a singular and pleasing variety, by its large rugged stem, crowned with a tuft of large spreading leaves and numerous flowers, which are produced in succession nearly all the summer. It succeeds well in any rich light soil, or a mixture of loam and peat will suit it very well: and it is readily increased by seeds, which ripen in abundance.

Stem shrubby, erect, simple, sometimes attaining the height of three or four feet; very rugged, occasionally by the persistent stipules. Leaves smooth and glossy: lower ones palmately 5-parted; those on the flower-stalks 3-parted: segments bipinnatifid or deeply lacinated, acute, mucronate, sharply toothed. Petioles long, bent towards the leaf, nearly cylindrical, slightly sulcate with several very shallow furrows, purple and much swollen at the base, and green upwards, smooth and glossy. Stipules large, ovate, bluish, their margins membranaceous, of a pale purple, persistent. Flower-stems dichotomous, quite smooth and glossy, as are the peduncles and calyx. Peduncles very short, fasciculate, 2-flowered. Involucre of four very small bracts, the two lower ones ovate, concave, bluish, double the size of the upper ones. Pedicels erect, about twice the length of the calyx. Calyx of five sepals, which are broadly lanceolate, mucronate, deeply furrowed with membranaceous margins. Petals 5, roundly obovate, of a light purple, darker at the





GERANIUM multifidum.

Multifid-leaved Crane's-bill.

G. multifidum, caule ramoso diffuso; ramis gracilibus, pubescentibus, foliis subtus albo-sericeis quinatis 5-partitisve; foliolis segmentisque tripartitis multifidis linearibus, pedunculis elongatis 1-2-floris, sepalis sericeis trinerviis, petalis emarginatis calyce sesquolongioribus.

Root perennial. *Stems* several from the same root; slender, spreading, prostrate if not supported, dichotomously branching, pubescent, about a foot in length. *Leaves* of a glossy green on the upper side, and of a silky white on the lower, quinate or 5-parted; leaflets or segments deeply 3-parted; divisions multifid, linear, blunt on the lower leaves, and acute on the upper ones. *Petioles* long and slender, bent towards the leaf, nearly cylindrical, a little thickened at the base, pubescent. *Stipules* deeply divided into three or four taper-pointed subulate divisions. *Peduncles* axillary, long and slender, 1 or 2-flowered. *Involucre* of two to five subulate acute bractes. *Pedicles* long and slender. *Sepals* 5, oblong, lanceolate, sericeous, strongly 3-nerved, mucronate; margins membranaceous. *Petals* 5, bearded at the base, of a rosy purple, obcordate, emarginate, strongly veined, about half as long again as the calyx. *Stamens* 10, slightly connected at the base, all producing fertile anthers. *Filaments* a little dilated at the base, slightly fringed. *Style* very short. *Stigmas* 5, very long, purple, reflexed.

We first observed this curious species of Geranium, in the summer of 1819, in the garden of Mr. Burchell,

at Fulham; where we saw several plants of it in bloom. It is a native of the Cape of Good Hope, and was raised from seed, brought from that country, by Mr. W. J. Burchell; and from a plant given by him to Robert Henry Jenkinson, Esq. our drawing and description were taken last summer. It is a hardy greenhouse plant, and will probably endure the winter in a common frame; so that it does not get too much moisture. It thrives well in a mixture of sandy loam and peat, and may be increased by cuttings, taken off while the shoots are young; or from seeds, which ripen plentifully, if some pollen be attached to the stigmas when in full bloom.

Root perennial. Stem several from the same root; slender, spreading, prostrate if not supported, dichotomously branching, pubescent, about a foot in length. Leaves of a glossy green on the upper side, and of a silky white on the lower, pinnate or 5-parted; leaflets or segments deeply 3-parted; divisions rounded, linear, blunt on the lower edge, and acute on the upper one. Petioles long and slender, bent towards the leaf, nearly cylindrical, a little thickened at the base, pubescent. Spikes deeply divided into three or four taper-pointed subulate divisions. Branches axillary, long and slender, 1 or 2-flowered. Leaves long and slender. Spikes 5-angled, bracteate. Petioles long and slender, monostachy; lanceolate, acuminate, strongly 3-nerved, mucronate; margins membranaceous. Petals 6, bearded at the base, of a rose purple, obcordate, emarginate, strongly veined, about half as long again as the calyx. Stamens 10, slightly connected at the base, all producing fertile anthers. Filaments a little dilated at the base, slightly fringed. Style very short. Stigmas 6, very long, purple, reflexed.

We first observed this curious species of *Gentiana* in the summer of 1819, in the garden of Mr. Burchell.



PELARGONIUM sphondyliifolium.

Swine's Parsnep-leaved Stork's-bill.

P. sphondyliifolium, caule suffruticoso carnosso subdecumbente, foliis ternatis pinnatifidisque utrinque pilosis apice recurvis; foliolis segmentisque laciniatis obtuse dentatis, umbellis multifloris, tubo nectarifero calyce reflexo quintuplo longiore.

Root tuberous, branching into numerous tubers of various shapes and sizes. *Stem* short, suffruticose, succulent, unequal in size, rather decumbent, clothed with subpersistent stipules; *branches* short and thick. *Leaves* large and spreading, very hairy on both sides, ternate; lower leaflets 2-parted, intermediate one pinnatifid, the points reflexed; *segments* distant from each other, deeply divided, sometimes nearly pinnatifid, bluntly toothed, sinuses rounded. *Petioles* long, slightly flattened on the upper side and rounded on the lower, much swollen at the base, clothed with long spreading hairs and short villous ones intermixed. *Stipules* short, broadly cordate, acute, joined to the base of the petioles. *Scape* branching, leafy at the base of the peduncles. *Peduncles* very long, cylindrical, thickly covered with long spreading villous hairs. *Umbels* many-flowered. *Involucre* of numerous broadly lanceolate acute bractes. *Pedicles* about the length of the bractes. *Calyx* 5-cleft; segments short, unequal, bluntish, all reflexed, and clothed with short hairs; the upper one ovate, the others lanceolate. *Nectariferous tube* long and slender, a little flattened on each side, clothed with short hairs, more than five times the length of the calyx. *Petals* 5, obovate, equal or nearly so, of a brilliant dark velvet, scarlet at the base, the upper ones

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slightly lined at the bottom. *Filaments* 10, united at the base, six bearing perfect anthers; the seventh a broad spatulate one, also bearing a small anther; sterile ones short and bluntish. *Style* short, pale flesh colour, slightly hairy at the base and smooth upwards. *Stigmas* 5, reflexed.

This curious plant is of hybrid origin, and was raised in 1823, at the Nursery of Mr. Colvill, from a seed of *P. ardens*, that had been fertilized with the pollen of *P. multiradiatum*; it is as near as possible intermediate between the two, both in its habit, leaves, and colour of the flowers. It requires precisely the same sort of treatment as *P. ardens*, succeeding well in a mixture of turfy loam, peat, and sand; or any other light sandy soil. The best method of propagating it is by the tubers of its roots.

PELAGONIA





PELARGONIUM dissectum.

Dissected-leaved Stork's-bill.

P. dissectum, caule fruticoso ramoso diffuso, foliis cordatis 5-7-partitis canescenti-pubescentibus; segmentis flabelliformibus imbricatis inciso-dentatis obtusis, umbellis multifloris paniculatis, petalis subæqualibus, tubo nectarifero calyce subæquali aut paulo brevior.

Pelargonium dissectum. *Colv. catal. ed. 2. p. 23. col. 3.*

Stem shrubby, much branched; *branches* spreading in various directions, rather succulent, thickly clothed with short white unequal hairs. *Leaves* cordate, 5 or 7-parted, covered on both sides with a canescent pubescence, more or less undulate; segments fan-shaped, overlapping each other, more or less deeply cut and toothed, segments and teeth bluntish. *Petioles* long and slender, slightly flattened on the upper side and convex on the lower, much dilated at the base, thickly clothed with short hairs, as are the peduncles and calyx. *Stipules* lanceolate, taper-pointed, joined to the base of the petioles. *Peduncles* panicked, cylindrical. *Umbels* many-flowered in a close head. *Involucre* of numerous broadly lanceolate, acute, keeled bractes. *Pedicels* unequal in length, some not so long, others double the length of the bractes. *Calyx* 5-cleft, segments lanceolate, acute, margins membranaceous, fringed, the upper one erect, the others reflexed. *Petals* 5, nearly equal in size, spatulately ligulate, of a pale blush; the two upper ones slightly emarginate, with a dark forked spot in the centre, and several short purple lines from it to the base, that are more or less branched. *Filaments* 10,

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united at the base, seven bearing anthers. *Style* short, purple, slightly hairy at the base, and smooth upwards. *Stigmas* 5, purple, reflexed.

This very distinct and truly curious plant is a hybrid production, the produce of *P. australe*, t. 68, that had been fertilized by the pollen of *P. incisum* or *P. canescens*, and partakes, in an equal degree, of both. In this plant we have the New Holland and Cape species intermixed; the only instance of the kind that we are at present acquainted with. Although an hybrid from two such distinct species, it is of as free growth as either of them, and forms a larger and stronger bush; thriving well in a mixture of turfy loam, peat, and sand, or any other light rich soil. Cuttings of it strike root freely, planted in pots and placed on a shelf in the greenhouse.

Our drawing was taken from a plant in the superb collection of Robert Henry Jenkinson, Esq.; where it was raised from seed that had been produced from his plants.

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E. D. Smith. del.

Pub by J. Ridgway 170 Piccadilly Feb. 1. 1825.

J. Watts. sc.

PELARGONIUM Kingii.

Mr. King's Stork's-bill.

P. Kingii, caule fruticoso ramoso, ramis patentibus villosis; foliis cordatis trifidis villosis: segmentis cuneatis subtrilobis, inæqualiter grosseque dentatis, stipulis ovato-lanceolatis acutis subdentatis, pedunculis 3-4-floris, petalis rotundato-obovatis, tubo nectarifero calyce subæquali.

Pelargonium Kingii. *Colv. catal. ed. 2. p. 22. col. 2.*

Stem shrubby, much branched; *branches* spreading, thickly clothed with long spreading villous hairs, and shorter ones intermixed; as is every other part of the plant, except the corolla. *Leaves* cordate, trifid, hollow in the centre, margins slightly undulate; *segments* cuneate, more or less imbricate, generally 2 or 3-lobed, deeply but unequally toothed. *Petioles* flattened on the upper side, and convex on the lower, widened at the base. *Stipules* ovately-lanceolate, acute, often toothed, ciliate. *Peduncles* 3 or 4-flowered, longer than the leaves, cylindrical. *Involucre* of six lanceolate, acute, fringed bractes. *Pedicles* longer than the bractes, about the length of the nectariferous tube. *Calyx* 5-cleft, laciniae lanceolate, acute, the upper one broadest, erect; points of the others reflexed. *Nectariferous tube* about the length of the calyx, much flattened on each side, and gibbous at the base. *Petals* 5, roundly obovate, imbricate, of a light scarlet, or deep salmon colour, edged with purple; the two upper ones about half as large again as the lower ones, with, or sometimes without an obscure brown spot in the centre, below which are two forked dark purple lines from the base,

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that are more or less branched. *Stamens* 10, united at the base; seven bearing anthers, which are generally imperfect. *Style* pale flesh-colour, hairy about half way up, the upper part smooth. *Stigmas* 5, purple, reflexed or revolute.

Our drawing of this beautiful plant was made last September, at the Nursery of Mr. Colvill, where it was raised from seed, the produce of *P. Husseyanum*, that had been mixed with the pollen of *P. rubescens*; it is very little like either of its parents, yet its similarity to *P. Wellsianum*, its cousin, is readily perceptible. It is of free growth, and continues in flower nearly all the year; but the autumn flowers are the finest, and of a much richer colour than the spring ones. A plant of it was in full bloom, at the Nursery of Mr. Colvill, this winter, a little before Christmas, and the flowers were at that season very brilliant. Like its nearest relatives, it succeeds best in a mixture of light turfy loam, peat, and sand, and cuttings soon strike root, when planted in pots and placed on a shelf in the greenhouse.

We have named the present subject in compliment to John King, Esq. of South Brent, Devon; a gentleman much attached to the family of Geraniaceæ, and who possesses a superb collection of them.





G. D. Smith. del.

Pub by J. Ridgway 170 Piccadilly March. 1. 1825.

J. Watts. sc.

PELARGONIUM incurvum.

Incurved-petaled Stork's-bill.

P. incurvum, caule fruticoso ramoso, ramis gracilibus flexuosis, foliis tripartitis dentatis pubescentibus: segmentis lateralibus bilobis: intermedio 3-5-lobato, stipulis cordato-ovatis acutis, pedunculis subpaniculatis 3-5-floris, petalis superis margine incurvis, tubo nectarifero calyce subduplo longiore.

Pelargonium incurvum. *Swt. hort. brit. inedit.*

Stem shrubby, hard and woody, brown-barked, much branched; *branches* numerous, spreading, flexuose, slender, thickly clothed with unequal spreading villous hairs, as are the petioles, peduncles, and calyx. *Leaves* 3-parted, bluntly toothed, attenuated down the footstalk, pubescent on both sides. *Petioles* flattened on the upper side and convex on the lower, a little swollen at the base. *Stipules* cordately ovate, acute, entire, villous. *Peduncles* in a kind of panicle, long and slender, 3 to 5 flowered. *Involucre* of 6 or 7 lanceolate, bluntish bractes. *Pedicles* slender, longer than the bractes, bent towards the flowers. *Calyx* 5-cleft; segments lanceolate, acute, the upper one broadest, erect, the others reflexed. *Nectariferous tube* unequal in length, sometimes double the length, at other times scarcely longer than the calyx, flattened and keeled on both sides, gibbous at the base. *Petals* 5, the two upper ones obovate, connivent at the base, their margins bent inwards, of an orangy scarlet, marked with purple branched lines from the base, and an obscure mark in the centre; three lower ones ligulate, spreading, of rather a lighter colour. *Filaments*

10, united at the base, seven bearing anthers, which are mostly sterile. *Style* purple, very hairy. *Stigmas* 5, purple, reflexed or revolute.

This handsome and very distinct plant is of hybrid origin, and was raised from seed, at the Nursery of Mr. Colvill, in 1821. The parent plant was *P. fulgidum*, that had been fertilized by one of the small-leaved sorts, perhaps *P. melissinum*. Being of small growth, and an abundant flowerer, makes it very desirable. Its flowers are also of a very brilliant colour; and it continues to flower all the summer, and till late in autumn. Like *P. ignescens*, it succeeds best in an equal portion of light turfy loam, peat, and sand; and cuttings strike root freely, if planted in pots in the same sort of soil, and placed on a shelf in the greenhouse.

Stem shrubby, hard and woody, brown-barked, much branched; branches numerous, spreading, flexuose, slender, thickly clothed with unequal spreading villous hairs, as are the petioles, peduncles, and calyx. Leaves 3-parted, bluntly toothed, attenuated down the footstalk, pubescent on both sides. Petals flattened on the upper side and convex on the lower, a little swollen at the base. Sepals cordately ovate, acute, entire, villous. Pedicels in a kind of panicle, long and slender, 2 to 3 flowered. Anthers of 6 or 7 lanceolate, bluish purple. Petals slender, longer than the pedicels, bent towards the lower. Calyx 5-lobed; segments 3-lanceolate, acute, the upper one broadest, erect, the others reflexed. Anthers are very unequal in length, sometimes double the length, at other times scarcely longer than the calyx; flattened and hooked on both sides. Petals 5, ribboned at the base, the two upper ones obovate, connate at the base, their margins bent inward, of an orange scarlet, marked with purple branched lines from the base, and an obscure mark in the centre; three lower ones linear, spreading, of rather a lighter colour. Filaments





E. D. Smith del.

Pub by J. Ridgway 170 Piccadilly March 1. 1825.

J. Walts. sc.

PELARGONIUM pedicellatum.

Long-pediced Stork's-bill.

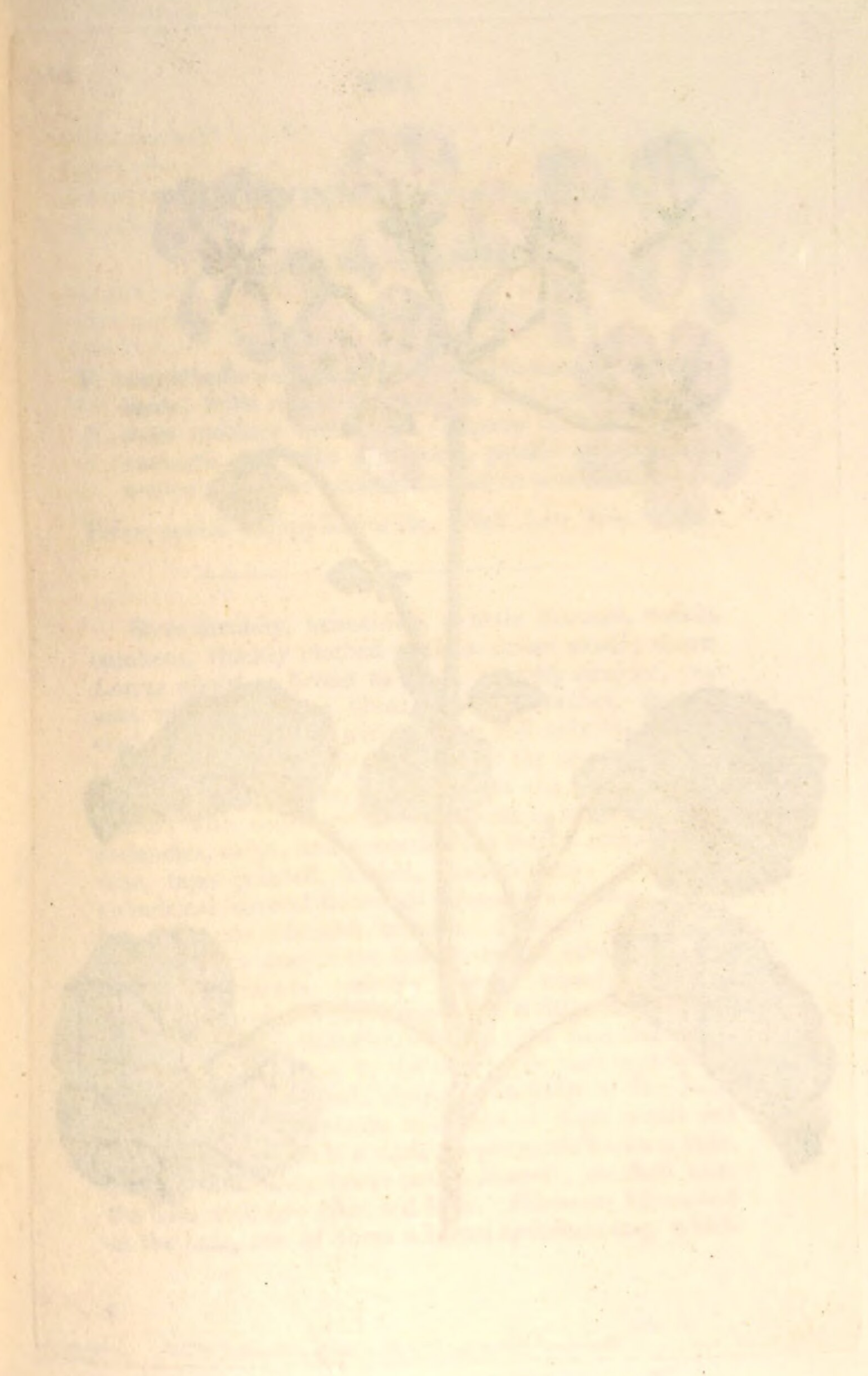
P. pedicellatum, subacaule, foliis glabris ciliatis carnosius 5-7-lobatis dentatis apice reflexis, stipulis cordatis acutis, umbellis multifloris, floribus longe pedicellatis, calycibus reflexis, petalis subæqualibus, tubo nectarifero calyce quintuplo longiore.

Pelargonium pedicellatum. *Swt. hort. brit. ined.*

Root tuberous, large, and clothed with a hard brown bark. *Stem* very short and rugged. *Leaves* smooth, thick, and succulent, of rather a greasy nature, fringed, 5 or 7-lobed, and toothed with small sharp teeth, strongly nerved underneath: lobes broadly wedge-shaped, bent back at the point and margins. *Petioles* long, slightly flattened on the upper side, and rounded on the lower, thickened at the base, glossy, but clothed with long spreading white hairs. *Stipules* short, broadly cordate, acute. *Scape* producing no leaves, thickly clothed with unequal spreading white hairs. *Umbels* many-flowered. *Involucre* of numerous small unequal bractes, some of them cordate, others ovate or lanceolate, acute. *Pedicles* very long and slender, some of them more than $2\frac{1}{2}$ inches in length, clothed with long spreading hairs and short down intermixed. *Calyx* 5-cleft, segments lanceolate, acute, all reflexed. *Nectariferous tube* about five times as long as the calyx, and about half the length of the pedicles, pubescent. *Petals* 5, obovate, nearly equal in size; two upper ones pale greenish yellow, marked with a bifid purple spot; lower ones dark purple, edged with pale yellow. *Filaments* 10, short and straight, united at the base, one of

them a very broad spatulate one, which produces no anther, six bearing anthers. *Pollen* golden yellow. *Style* short, green and smooth. *Stigmas* 5, green, reflexed.

This very distinct and curious plant was received, by Mr. Colvill, from the Cape, in 1822; but it did not produce its flowers till last summer, at which time our drawing was taken. It belongs to the same section as *P. triste*, *P. pulverulentum*, &c. but is readily distinguished from all its nearest allies, by the long pedicles to its flowers, and its smooth greasy leaves. It requires the same kind of treatment as the other plants in the same section: an equal mixture of light turfy loam, peat, and sand, is the best soil for it, keeping it quite dry when in a dormant state, and shifting it into fresh soil in spring. The best method of increasing it is by the little tubers of its roots: those must be planted with their tops above the surface of the mould, or they will be apt to rot.





E. D. Smith del.

Pub by J. Ridgway 159 Piccadilly March 1. 1825.

J. Walton sc.

PELARGONIUM campylæflorum.

Campylia-flowered Stork's-bill.

P. campylæflorum, caule fruticoso flexuoso subdecumbente, foliis rotundato-cordatis reniformibusve crenatis molliter tomentosis, stipulis cordatis acutis carinatis, umbellis plurifloris, petalis superis suborbiculatis, tubo nectarifero calyce paulo longiore.

Pelargonium campylæflorum. *Swt. hort. brit. inedit.*

Stem shrubby, branching, a little flexuose, subdecumbent, thickly clothed with a dense woolly down. *Leaves* about as broad as long, roundly cordate, crenate with numerous blunt shallow notches, densely clothed on both sides with a short soft velvety tomentum. *Petioles* slightly flattened on the upper side and rounded on the lower, thickened at the base, densely clothed with short spreading villous hairs, as are the peduncles, calyx, and nectariferous tube. *Stipules* cordate, taper-pointed, keeled, subpersistent. *Peduncles* cylindrical, several-flowered. *Involucre* of from 6 to 8 broadly ovate bluntish bractes. *Pedicles* unequal in length, some double the length of the others. *Calyx* 5-cleft, segments roundly ovate, concave, blunt, strongly nerved. *Nectariferous tube* a little longer than the calyx, much flattened on each side, and thickened at the base. *Petals* 5, the two upper ones nearly orbicular, of a pale blush, changing to white as they fade, marked near the centre with two or three small red spots, below which is a dark purple mark on each side, a little branched; lower petals obovate, marked near the base with two faint red lines. *Filaments* 10, united at the base, one of them a broad spatulate one, which

ranks the present plant in the section *Monospatalla*: this and six others produce anthers, but they are always imperfect in the specimens that we have examined. *Style* short, pale red, hairy at the base and smooth upwards. *Stigmas* 5, purple, reflexed.

The present subject is a very singular hybrid production, and was raised in the select and curious collection of Robert Henry Jenkinson, Esq. from a seed of *P. particeps*, that had been fertilized by the pollen of *Campylia cana*. It is the first hybrid that has come under our notice, intermediate between *Campylia* and *Pelargonium*; and, although its origin is between two such very different parents, it is of as free growth as any plant belonging to the family. It is as near as possible intermediate between the two. The habit of the plant and form of the leaves are of *P. particeps*, likewise the number and form of the stamens; but the stipules and form as well as the colour of the flower, are of *Campylia cana*.

It requires precisely the same kind of soil as recommended for both its parents, a mixture of turfy loam, peat, and sand, and a pretty good supply of water, keeping it as much as possible from its leaves. Cuttings strike root freely, planted in pots and placed on a shelf in the greenhouse.

ARGENT



The plant is a small, upright, perennial herb, with a single, slender, erect stem, which is branched at the top. The leaves are large, rounded, and deeply lobed, with prominent veins. The flowers are small, light-colored, and arranged in a terminal panicle. The plant is native to the mountains of the Andes, where it is cultivated for its medicinal properties. It is used to treat various ailments, including fever, inflammation, and rheumatism. The plant is also used as a tonic and a stimulant. The leaves are rich in tannins and flavonoids, which are responsible for its medicinal properties. The plant is also used in traditional medicine to treat skin diseases and to improve circulation. The plant is a member of the Rubiaceae family, which is known for its medicinal plants. The plant is a native of the Andes, where it is cultivated for its medicinal properties. It is used to treat various ailments, including fever, inflammation, and rheumatism. The plant is also used as a tonic and a stimulant. The leaves are rich in tannins and flavonoids, which are responsible for its medicinal properties. The plant is also used in traditional medicine to treat skin diseases and to improve circulation. The plant is a member of the Rubiaceae family, which is known for its medicinal plants.



PELARGONIUM rotundilobum.

Round-lobed Stork's-bill.

P. rotundilobum, foliis planis cordatis profunde quinquelobis obsolete dentatis mollibus: lobis divaricatis rotundato-obtusis, stipulis lato-cordatis acutis margine reflexis, umbellis subsexfloris, tubo nectarifero calyce reflexo subæquali.

Pelargonium rotundilobum. *Swt. hort. brit. inedit.*

Stem shrubby, branching; *branches* spreading, thickly clothed with spreading villous hairs and soft down intermixed. *Leaves* flat, cordate, deeply 5-lobed, obsoletely notched with short blunt notches, hairy on both sides, very soft to the touch, much nerved underneath, the nerves reticulately branched: *lobes* distant, spreading, very broad and rounded. *Petioles* slightly flattened on the upper side and rounded on the lower, thickly clothed with spreading villous hairs and soft down intermixed, as are the peduncles, bractes, and calyx. *Stipules* broadly cordate, acute, the margins reflexed. *Peduncle* cylindrical, generally 6-flowered. *Involucre* of 6 or 8 broadly lanceolate taper-pointed bractes, all united into one at the base. *Pedicles* very short, hairy. *Calyx* 5-cleft, upper segment ovate, the others lanceolate, all reflexed. *Petals* 5, cuneate; the two upper ones broadest, brick-coloured with two dark brown spots in the centre, between them and the base are numerous purple branched lines on nearly a white ground; lower petals of rather a lighter colour. *Filaments* 10, united at the base, seven bearing anthers, which are generally imperfect. *Style* pale-coloured, very long, hairy at the base and smooth upwards. *Stigmas* 5, pale purple, spreading.

Our drawing of this pretty plant was taken last summer in the collection of Robert Henry Jenkinson, Esq. It is of hybrid origin, but what its real parents were it is difficult to determine. The leaves are nearer like *P. Breesianum* than any other, and the flowers are not very different from *P. Broughtoniæ*. We have no doubt but it is the produce of hybrids for several generations.

A very free-growing plant, thriving well in a mixture of light turfy loam, peat, and sand, or any other light vegetable soil, producing its elegant flowers all the summer, and till late in autumn; and may be readily increased by cuttings, planted in pots in the same sort of soil, and placed in a sheltered situation.

Stem shrubby, branching; leaves alternate, thickly clothed with spreading villous hairs, and soft down intermixed. Leaves flat, cordate, deeply 5-lobed, obsolete notched with short blunt teeth, hairy on both sides, very soft to the touch, nerves marked underneath, the nerves reticulate, branched, lobes distinct, spreading, very broad and rounded. Petioles slightly flattened on the upper side and rounded on the lower, thickly clothed with spreading villous hairs and soft down intermixed; as are the peduncles, bracts, and calyx. Sepals broadly cordate, bluntly 5-lobed, reflexed. Petals cylindrical, generally 5-flowered, fascicles of 5 or 6 broadly lanceolate, taper-pointed bracts, all united into one at the base. Petals very short, hairy. Ovary 5-lobed, upper segment ovate, the others lanceolate, all reflexed. Style 5-cornate; the two upper ones broadest, thick-coloured with the dark brown spots in the centre, between them and the base are numerous purple branched lines on nearly a white ground; lower petals of rather a lighter colour. Filaments 10, united at the base, seven bearing anthers, which are generally imperfect. Style pale-coloured, very long, hairy at the base and smooth upwards. Stigma 5, pale purple, spreading.



Stem erect, branched, hairy
leaves deeply lobed, hairy
petals white, lobes rounded
style not exserted
fruit globose, hairy
seed globose, hairy
habitat in wet places
cultivated in gardens
as a pot herb
the leaves are used
in soups and salads
the seeds are used
in medicine



D. Smith del.

Pub. by J. Ridgway 100. Piccadilly Apr. 1. 1825.

J. Smith sc.

PELARGONIUM Dobreeanum.

Mrs. Dobree's Stork's-bill.

P. Dobreeanum, caule fruticoso ramoso : ramis gracilibus villosis, foliis cordatis oblongis sinuatis v. profunde 7-lobis undulatis obsolete dentatis pubescentibus subviscosis : lobis apice reflexis, umbellis subsexfloris, petalis patentibus.

Pelargonium Dobreeanum. *Swt. hort. brit. p. —. n. 320. ined.*

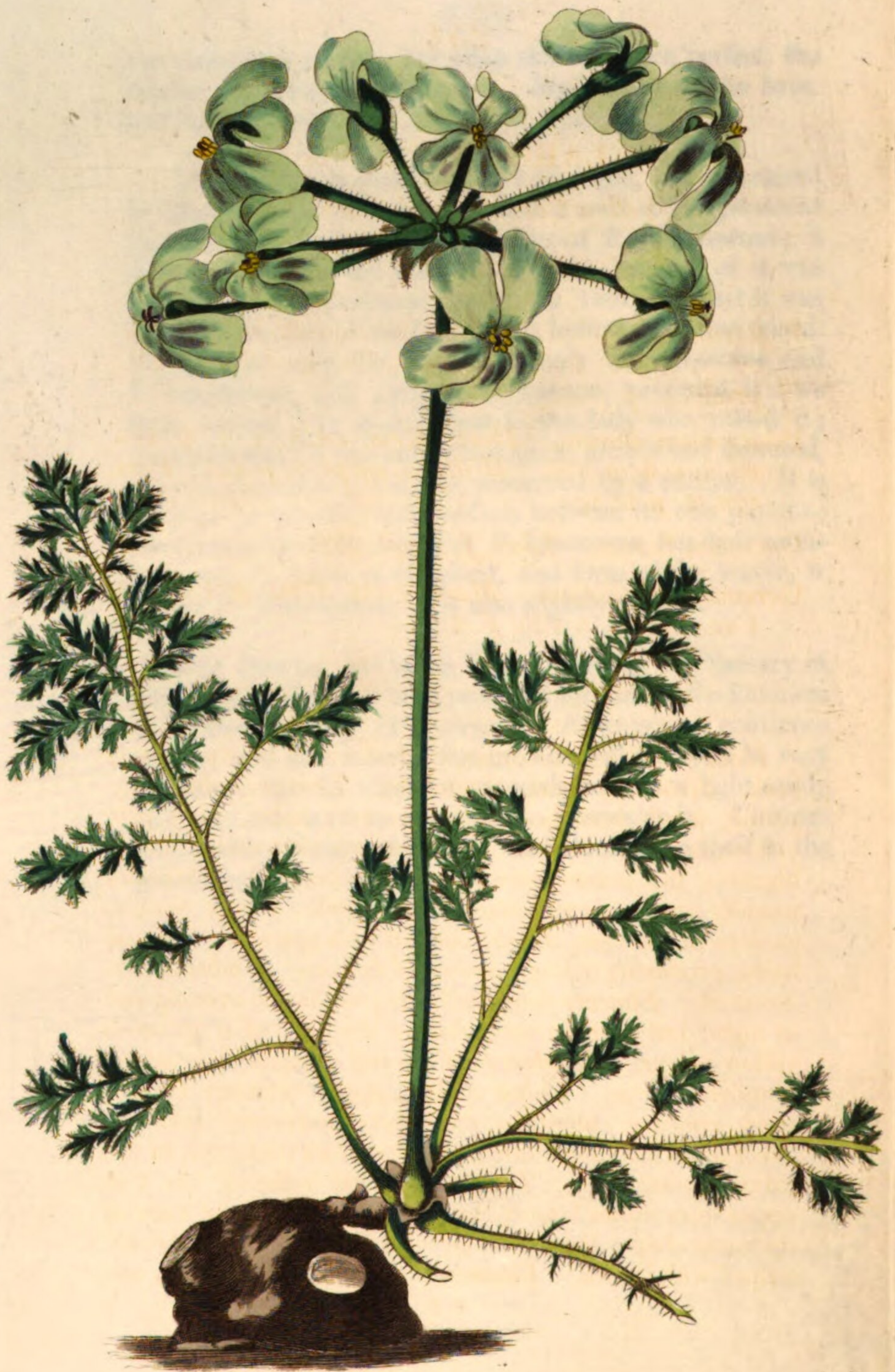
Stem shrubby, branching : branches slender, spreading, thickly clothed with unequal soft villous hairs. *Leaves* oblong, cordate at the base, the sinus generally overlapped, pinnatifidly sinuate or deeply 5 to 7-lobed, much undulate, and toothed with very small teeth, more or less pubescent, slightly viscid : lobes rounded, a little reflexed at the points ; sinuses rounded. *Petioles* slightly flattened on the upper side and rounded on the lower, thickened at the base, thickly covered with unequal villous hairs, as are the peduncles, calyx, and nectariferous tube. *Stipules* short, cordate, taper-pointed, villous and fringed. *Peduncles* stout, thickened at the base. *Umbels* 5 or 6-flowered. *Involucre* of several lanceolate, acute bractes. *Pedicles* short, villous. *Calyx* 5-cleft, upper segment erect, the others reflexed. *Nectariferous tube* unequal in length, longer than the calyx. *Petals* 5, the 2 upper ones, broadly obovate, cuneate, of a bright orangy scarlet, with a dark spot in the centre, and a white mark below it, from which branch numerous short dark lines : lower petals oblongly obovate, of rather a lighter colour, much spreading. *Filaments* 10, connected at the base, 7 bearing anthers, which

are sometimes perfect, but often sterile; when perfect, the flowers are always much larger. *Style* hairy at the base, and smooth upwards. *Stigmas* 5, reflexed.

This handsome plant is of hybrid origin, and was raised by Mrs. Dobree, of Guernsey, from a seed of *P. ignescens* that had been fertilized by the pollen of *P. glutinosum*; it was raised about the year 1818, and a drawing of it was sent to the Horticultural Society in 1820, so that it was amongst the first of the fine scarlet hybrids that was raised. We believe only Sir R. C. Hoare's *P. ignescens* and *P. scintillans*, and perhaps *P. nanum*, preceded it: we have named it in compliment to the lady who raised it; we understand it was nearly lost again, after it had flowered, the old plant dying, but was preserved by a cutting. It is as near as possible intermediate between its two parents; the flowers have the colour of *P. ignescens*, but their number, and the habit of the plant, and form of the leaves, is nearer *P. glutinosum*; it is also slightly viscous.

Our drawing was taken from a plant at the Nursery of Mr. Colvill, that had been procured for him by the kindness of S. Pearce, Esq. of Guernsey. At present it continues scarce; and as it is not a fast grower, will not soon be very common; like its allies, it succeeds best in a light sandy soil, and care must be taken not to overwater it. Cuttings root readily, if planted in pots, and placed on a shelf in the greenhouse.





C. D. Smith. del.

Pub. by J. Ridgway 169. Piccadilly Apr. 1. 1825.

J. Wallis. sc.

PELARGONIUM flavum.***Yellow Carrot-leaved Stork's-bill.***

P. flavum, subcaulescens, foliis decomposite laciniatis hirsutis; laciniis linearibus, umbellis multifloris. *DC. prodr.* 1. p. 662.

Pelargonium flavum. *Hort. Kew. ed.* 1. v. 2. p. 418. *ed.* 2. v. 4. p. 166. *Willden. sp. pl.* 3. p. 651. *Pers. syn.* 2. p. 228.

Geranium flavum. *Linn. f. suppl.* 257.

Geranium daucifolium. *Murr. gætt.* 1780. p. 13. t. 4. *Cav. diss.* 4. t. 120. f. 2.

Root very large, tuberous, clothed with a brown cracked bark. **Stem** very short, decumbent. **Leaves** doubly compound, much branched, laciniate, very hairy, of a pale yellowish green: leaflets and segments very small, linear, bluntish, the points curved inwards, bearded. **Stipules** roundly ovate, membranaceous, fringed. **Scape** simple, swollen at the base, thickly clothed with spreading unequal hairs, producing a single umbel of flowers. **Umbel** many-flowered. **Flowers** delightfully fragrant in the evening and at night, but without scent during the day, of a greenish yellow colour. **Involucre** of several unequal, lanceolate, bluntish bractes. **Calyx** 5-cleft, upper segment largest, erect, concave, bluntish, the others narrower, reflexed. **Nectariferous tube** more than three times the length of the calyx, sessile, hairy. **Petals** 5, a little reflexed, the two upper ones rather largest, broadly obovate; lower ones of the same shape, but narrower, of a greenish yellow, faintly striped with brown. **Filaments** 10, united at the base, one

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of them a broad spatulate one, which produces no anther,
6 bearing perfect anthers. *Style* very short. *Stigmas* 5,
purple, reflexed or revolute.

This curious plant is an old inhabitant of our green-
houses, having been introduced from the Cape in 1724; it
is, however, seldom to be met with at present, most probably
from its not being so showy as others of the genus, yet we
think its singularity and delightful fragrance entitle it to a
place in any collection. We have not yet seen any hybrid
produced from the present plant, but believe some very
curious ones might be obtained. Its time of flowering is
generally in Autumn, after many of its more showy com-
petitors have done blooming for the season; like the other
plants of this section, it succeeds best in a very light
sandy soil, and a dry airy situation in the greenhouse; it
may be increased by the little tubers from the roots, or from
seeds, which ripen plentifully, if some pollen be attached
to the stigmas when in bloom.

Our drawing was taken from a plant in the select
collection of Robert Henry Jenkinson, Esq.





E. D. Smith del.

Pub. by J. Ridgway 169 Piccadilly Ap. 1. 1825.

J. Walter sc.

PELARGONIUM *comptum*.*Decked Stork's-bill.*

P. comptum, caule erecto carnosio ramoso pubescente, foliis rotundato-reniformibus obsolete lobatis crenato-dentatis: supra glabris subpubescentibus subtus tomentosis, stipulis acuminatis subpersistentibus, umbellis multifloris subpaniculatis, tubo nectarifero calyce quadruplo longiore.

Pelargonium comptum. *Swt. hort. brit. p. —. n. 59. inedit.*

Stem shrubby, erect, branched, succulent, clothed with a hard brown bark, pubescent. *Leaves* kidney-shaped, rounded, slightly lobed, unequally and rather deeply notched, with blunt rounded teeth, of a glossy green, but slightly pubescent on the upper side, and tomentose underneath. *Petioles* slender, nearly cylindrical, swollen at the base, thickly clothed with short villous hairs. *Stipules* narrowly lanceolate, taper-pointed, villous, hardening into a sort of spine, and continuing for a considerable time. *Flower-stem* paniculately branched, thickly clothed with long spreading villous hairs and short down intermixed. *Peduncles* villous. *Umbels* many-flowered. *Involucre* of 6 or 7 lanceolate, acute, villous bractes. *Pedicles* very short, often wanting. *Calyx* 5-cleft, villous, segments unequal, the back one ovate or broadly lanceolate, blunt, concave, erect, the others narrower, reflexed. *Nectariferous tube* slender, about 4 times the length of the calyx, thickly clothed with unequal, soft, villous hairs. *Petals* 5, nearly obcordate; the upper ones very little larger than the others, of a bright pink, light at the base, and a dark

purple spot in the centre, with numerous short purple stripes below it: lower petals darker, also marked with a purple spot, and obsoletely lined from the base. *Filaments* 10, united at the base, one of them a broad spatula-shaped one, which produces no anther; 6 bearing anthers. *Style* short, smooth. *Stigmas* 5, purple, reflexed.

This grand flowering plant is of hybrid origin, and was raised in 1821 at the Nursery of Mr. Colvill, from a seed of *P. cortusæfolium*, the flowers of which had been fertilized by the pollen of *P. sæpeflorens*. It is by far a much handsomer plant than either of its parents, and also more hardy, producing its handsome flowers in abundance all the Summer, and till late in Autumn; those also remain several days without dropping, so that the whole umbel is seen in flower at once; the only care it requires, is that it does not get too much water in Winter, but in Summer it requires a regular supply. It succeeds best in a light sandy soil, or an equal mixture of light turfy loam, peat, and sand, will suit it very well. Cuttings will also strike root readily, planted in pots in the same sort of soil, and placed on a shelf in the greenhouse, letting them remain without water for a few days after planting, that the wound may dry up, or they will be liable to rot; it may also be increased by the tubers of its roots.





S. D. Smith del.

Pub. by J. Ridgway 169 Piccadilly Apr. 1. 1825.

J. Watts sc.

PELARGONIUM ringens.*Ringent-flowered Stork's-bill.*

P. ringens, subcaulescens, foliis pinnatis pinnatifidisque canescenti-pubescentibus, foliolis segmentisque cuneatis pinnatifido-laciniatis grosse dentatis, scapo folioso paniculato, petalis inferioribus concavis subconniventibus.

Pelargonium ringens. *Colv. catal. ed. 2. p. 22. col. 2.*

Root tuberous, scaly, branching out into numerous small tubers. **Stem** very short, erect, branching a little, rough and rugged, occasioned by the remains of the leaves that are fallen. **Leaves** long and spreading, pinnate or pinnatifid, and clothed with a soft hoary pubescence: leaflets or segments wedge-shaped, unequally cut and toothed with large roundish teeth, lower ones pinnatifid. **Petioles** long and rather slender, flattened a little on the upper side, and rounded on the lower, more or less clothed with soft spreading white hairs. **Stipules** attached to the base of the petioles, ovately-lanceolate, taper-pointed. **Scape** leafy, branching, villosely hairy, as are the peduncles and calyx. **Umbels** many-flowered. **Involucre** of 6 broadly lanceolate, acute bractes. **Calyx** 5-cleft, upper segment erect, concave, bluntish; the others reflexed, and more acute. **Nectariferous tube** unequal in length, sometimes scarcely longer than the calyx, at others more than double the length, hairy. **Flowers** of a light scarlet, ringent, upper petals oblong, reflexed, marked at the base with a few dark, branching lines: lower ones smaller, concave, more or less connivent. **Filaments** 10, connected, 7 bearing anthers, which in our specimens were all imperfect. **Style** short. **Stigmas** 5, reflexed.

A handsome plant, also a hybrid production, raised in the collection of Robert Henry Jenkinson, Esq. from a seed of *P. fulgidum* that had been mixed with the pollen of *Hoarea corydaliflora*, or some nearly related plant. It is of very free growth, and continues in bloom all the Summer, beginning to flower the early part of April; like the others to which it is nearest related, it thrives best in a mixture of light turfy loam, peat, and sand, and the pots to be well drained with potsherds broken small, that the water may pass readily off, nothing being so injurious to the tuberous rooted species, as the mould to get sodden in the pots. When they have done flowering, and their leaves begin to decay, they should be kept quite dry, till they show an inclination to begin to grow again; they should then be shifted into other pots in fresh mould, and watered sparingly at first, and as they begin to grow they require a more constant supply, but never so much as the shrubby species. It is readily increased by the little tubers from the root.



PELARGONIUM Chærophyllum.

Cow-Parsley-leaved Stork's-bill.

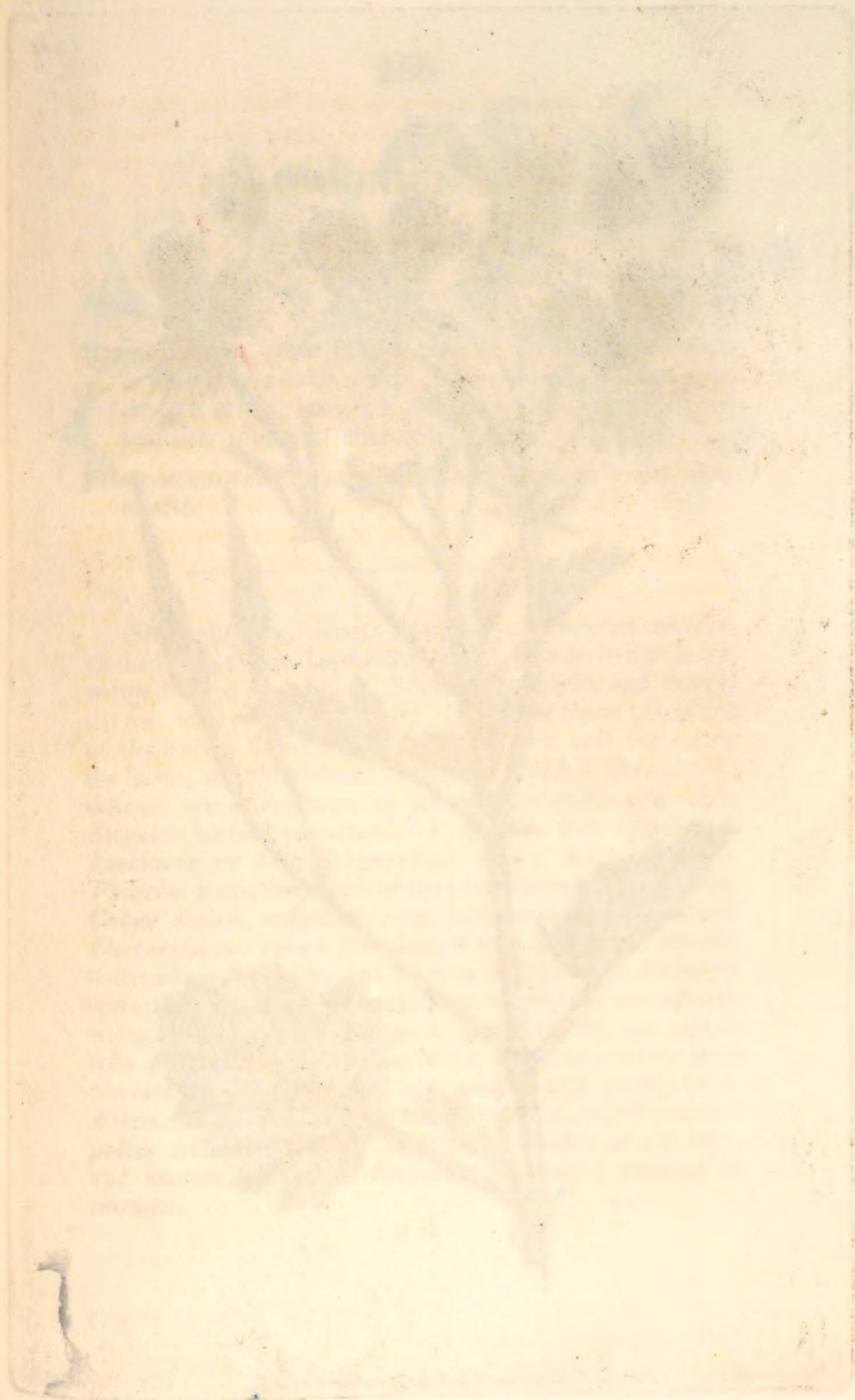
P. Chærophyllum, caule erecto suffruticoso carnososquamoso, foliis pinnatifidis bipinnatifidisque pubescentibus: segmentis laciniatis dentatis obtusis, stipulis cordato-ovatis acutis subpersistentibus, scapo flexuoso paniculato-ramoso, umbellis multifloris, tubo nectarifero calyce subtriplo longiore.

Pelargonium Chærophyllum. Swt. hort. brit. p. —.
n. 23. ined.

Stem suffruticose, erect, succulent, somewhat scaly, occasioned by the subpersistent stipules and cracked bark. *Leaves* pinnatifid, thickly clothed on both sides with short hairs, very soft to the touch; segments pinnatifid or deeply lacinate, toothed, obtuse. *Petioles* slightly flattened on the upper side and rounded on the lower, a little thickened at the base, densely clothed with short hairs, and soft down intermixed. *Stipules* cordately ovate, acute, partly remaining persistent, joined to the base of the petioles. *Scape* long, somewhat flexuose, paniculately branched, leafy at the point. *Peduncles* cylindrical, many-flowered. *Involucre* of several linearly-lanceolate, taper-pointed, hairy bractes. *Pedicles* slender, longer than the bractes. *Calyx* 5-cleft, segments unequal, the upper one erect, ovately-lanceolate, acute, concave, keeled, much longer than the others, which are lanceolate, acute, and slightly reflexed. *Nectariferous tube* about 3 times longer than the calyx, flattened and keeled on each side, gibbous at the base, slightly hairy. *Petals* 5, obovate, the 2 upper ones about double the size of the others, of a bright scarlet,

tinged with dark brown, and marked from the base with several dark lines that are slightly branched; lower ones also marked with 2 dark lines near the base, and between them tinged with dark brown. *Filaments* 10, united at the base, 7 bearing anthers, which are always fertile: no spatulate one, as might be expected from its habit. *Pollen* pale yellow. *Style* pale flesh-colour, hairy. *Stigmas* 5, pale red, reflexed.

A very curious hybrid production, raised at the Nursery of Mr. Colvill, in 1822, from a seed of *P. fulgidum* that had been fertilized by the pollen of *P. sanguineum*, and it is as near as possible intermediate between its two parents; its flowers are not to be surpassed in brilliancy of colour, by any with which we are acquainted; and by its singularity and decided difference from all others, makes it truly desirable. It requires precisely the same kind of management, as others of the same tribe; a mixture of light turfy loam, peat, and sand, suit it very well; and cuttings taken off when in a free growing state, will soon strike root, if planted in pots in the same kind of soil, and placed on a shelf in the green-house, giving them no water for the first 2 or 3 days, till the cut is dried up, or they will be apt to rot. It may also be increased from the little tubers of its roots.





G. D. Smith. del.

Pub. by J. Ridgway 169 Piccadilly May. 1. 1825.

J. Watts. sc.

PELARGONIUM veniflorum.*Veined-flowered Stork's-bill.*

P. veniflorum, caule erecto ramoso, foliis basi cuneatis ovatis quinquelobis acutis inciso-dentatis, stipulis lanceolatis acutis, umbellis 3-4-floris, petalis venosis patentibus, tubo nectarifero calyce paulo longiore.

Pelargonium veniflorum. *Swt. hort. brit. p. —. n. 222. inedit.*

Stem shrubby, erect, branching; branches slender, clothed with unequal spreading hairs. *Leaves* ovate, acute, wedge-shaped at the base, 5-lobed, unequally and sharply cut and toothed, slightly hairy. *Petioles* about the length of the leaves, flattened on the upper side and convex on the lower, a little widened at the base, thickly clothed with unequal spreading hairs, as are the peduncles and calyx. *Stipules* lanceolate, acute. *Peduncles* 2 to 4-flowered. *Involucre* of 4 to 6 lanceolate, acute, fringed bractes. *Pedicles* about the length of the nectariferous tube, slender. *Calyx* 5-cleft, segments long, lanceolate, taper-pointed. *Nectariferous tube* a little longer than the calyx, broadly flattened on each side, and gibbous at the base. *Petals* 5, spreading, the 2 upper ones obovate, slightly emarginate, white, with a dark purple patch in the centre, and numerous purple veins branching in all directions: lower ones obovately oblong, rounded, also marked with purple veins. *Filaments* 10, united at the base, 7 bearing perfect anthers: *pollen* orange-coloured. *Style* purple, hairy at the base, and smooth upwards. *Stigmas* 5, purple, reflexed or revolute.

This is also a hybrid production, and was raised at the Nursery of Mr. Colvill, in 1822, from a seed of *P. Hoareanum*, that had been fertilized with the pollen of *P. striatum*; it is a very pretty plant, and as hardy as any of the tribe to which it is related, thriving well in a mixture of turfy loam, peat, and sand, or any light vegetable soil; it will also succeed well in a smallish sized pot, as its roots are not so luxuriant as many of the stronger growing sorts; the cuttings do not root so freely as some of the other kinds, particularly if they are allowed to get too ripe before they are taken off; the young shoots will strike root much more freely; those must be planted in pots, and placed on a shelf in the green-house.

Stems shrubby, erect, branching; branches slender, clothed with unequal spreading hairs. Leaves ovate, acute, wedge-shaped at the base, 5-lobed, unequally and sharply cut and toothed, slightly hairy. Petioles about the length of the leaves, flattened on the upper side and convex on the lower, a little widened at the base, thickly clothed with unequal spreading hairs, as are the peduncles and calyx. Stipules lanceolate, acute. Pedicels 2 to 4-flowered. Involucres of 4 to 6 lanceolate, acute, fringed bracts. Pedicels about the length of the nectariferous tube, slender. Calyx 5-cleft, segments long, lanceolate, taper-pointed. Nectariferous tube a little longer than the calyx, broadly flattened on each side, and gibbous at the base. Petals 5, spreading, the upper ones obovate, slightly emarginate, white, with a dark purple patch in the centre, and numerous purple veins branching in all directions; lower ones obovately oblong, rounded, also marked with purple veins. Filaments 10, united at the base, 7 bearing perfect anthers; pollen orange-colored. Style purple, hairy at the base, and smooth upwards. Stigmas 2, purple, reflexed or revolute.

PERLAEONIA

(Nymphaeaceae)





PELARGONIUM cynosbatifolium.*Cynosbati-leaved Stork's-bill.*

P. cynosbatifolium, caule fruticoso ramoso; ramis confertis brevissimis, foliis cordatis trilobis obtusis denticulato-crenatis pilosis: lobo medio trilobo, stipulis cordatis acuminatis, pedunculis 2-5-floris, petalis subæqualibus, tubo nectarifero brevissimo calyce triplo brevior.

Pelargonium cynosbatifolium. *Willden. hort. berol. t. 78.*

Enum. v. 2. p. 708. Link enum. v. 2. p. 193. DC. prodr. 1. p. 654. Hort. sub. lond. p. 152.

Geranium oxoniense. *Andrews's geran. c. ic. et Hortulanorum.*

Stem shrubby, much branched: *branches* very short, crowded, spreading, thickly clothed with spreading villous hairs, as is every other part of the plant, except the corolla. *Leaves* cordate, deeply 3-lobed or nearly pinnatifid, obtuse, roughish, margins finely but bluntly notched or toothed, underneath prominently nerved, the nerves branching in all directions: middle lobe 3-lobed; side ones entire, or sometimes shortly 2-lobed. *Petioles* much flattened, and furrowed on the upper side, and convex on the lower, widened at the base. *Stipules* cordate, taper-pointed, sometimes toothed, ciliate. *Peduncles* short and stiff, cylindrical, from 2 to 5-flowered. *Involucre* of 6 or 7 ovate or broadly lanceolate concave pointed bractes. *Pedicels* longer than the bractes. *Calyx* 5-cleft, segments erect or slightly spreading, oblongly-lanceolate, concave, pointed. *Nectariferous tube* very short, (in some flowers

wanting,) about 3 times shorter than the calyx. *Petals* 5, nearly equal, the 2 upper ones rather largest, (sometimes increased to 6 or 7,) roundly obovate, of a light rose or pink, the upper ones marked with a bright violet spot, from which to the base are 2 forked dark purple lines, that are slightly branched: lower petals faintly striped. *Stamens* 10, erect, connected at the base, 5 to 7 bearing anthers, sometimes more in the many-petaled flowers. *Style* short, pale, all over hairy. *Stigmas* 5, purple, about the length of the style, reflexed.

This plant is an old inhabitant of our green-houses, where it has generally passed under the name of the Oxford Geranium, having, we believe, been first raised from seed at the Botanical Garden at Oxford. We have no doubt but it is a hybrid production, and one of its parents must have been *P. quercifolium*, but what the other was is not so easily ascertained; we suspect it might be *P. adulterinum*; it varies with 5 to 10 petals, and also very much in the number of its stamens, according to the strength of the plant; the stamens are generally sterile, another circumstance indicative of its hybrid origin. We suppose the name of *P. oxaloides*, by which it is commonly known by the German gardeners, has originated from a confusion of *P. oxoniense*, by which name they most probably received it from this country. It is a pretty little snug growing bushy plant, and produces abundance of bloom when grown well, succeeding best in light rich soil, and the pots well drained, as it is very liable to suffer from too much moisture. Cuttings of it strike root readily, if planted in pots, and placed on a shelf in the green-house.

Our drawing was taken last Summer, from a plant sent us by Mr. William Smith, from the collection of the Earl of Liverpool, Coombe-wood.





C. D. Smith. del.

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J. Walts. sc.

HOAREA Colvillii.*Colvill's Hoarea.*

H. Colvillii, subacaule, radice tuberoso, foliis ternatis pinnatifidisque utrinque hirsutis: foliolis inferioribus bilobis; lobis cuneatis rotundato-dentatis: terminali maximo ovato sinuato-lobato obtuse dentato, scapo folioso ramoso, umbellis multifloris, petalis patentibus, tubo nectarifero calyce duplo longiore.

Hoarea Colvillii. *Swt. hort. brit. p. —. n. 38.*

Root tuberous. **Stem** none, or very short. **Leaves** embracing each other and spreading in a radiate form, ternate, or pinnatifid, very hairy on both sides: lower leaflets 2-lobed, lobes cuneate, spreading, rounded at the points, and toothed with 2 or 3 large bluntly rounded teeth; terminal leaflet very large, ovate, sinuately lobed, and toothed with large bluntly rounded teeth. **Petioles** very hairy, much flattened on the upper side and rounded on the lower, widened at the base. **Stipules** broadly lanceolate, taper-pointed, joined to the base of the petioles. **Scape** long, branching, leafy at the base of the peduncles, thickly clothed with long spreading white hairs, as are the peduncles and calyx. **Peduncles** long, cylindrical. **Umbels** many-flowered. **Involucre** of numerous narrowly lanceolate, acute, villous bractes. **Pedicles** unequal in length, some as long, others not half the length of the bractes. **Calyx** 5-cleft, segments lanceolate, bluntish, the upper one broadest, erect, the others reflexed. **Nectariferous tube** slender, flattened on each side, about twice the length of the calyx. **Petals** 5, spreading, of a bright crimson, tinged and marked with dark brown: upper ones broadly

ligulate, slightly bent from about the middle, lower ones not half so broad, linearly ligulate. *Filaments* 10, connected at the base, every other one bearing anthers, points of the sterile ones curved inwards. *Style* pale red, very hairy. *Stigmas* 5, red, reflexed.

This grand flowering plant is a hybrid production, and was raised at the Nursery of Mr. Colvill, in 1823, from a seed of *H. melanantha*, that had been fertilized by the pollen of *P. ardens*. It is a very free growing plant, and begins flowering early in April, and, if well managed, will continue to bloom till late in Autumn; the habit of the plant is as near as possible intermediate between its two parents, but it far surpasses them both in beauty. It succeeds well in a mixture of light turfy loam, peat, and sand, the same as recommended for the other tuberous rooted species; but this does not require to be kept long without water, as many of the others do, as it continues but a very short time in a dormant state, but is growing nearly all the year. The best method of increasing it, is by the little tubers from the root.





G. D. Smith. del.

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J. Walther sc.

PELARGONIUM acidum.

Sour-leaved Stork's-bill.

P. acidum, subacaule, radice tuberoso, foliis ovatis integris trifidisve sinuatis dentatis glabris, stipulis petiolo adhærentibus ovato-lanceolatis acuminatis subdentatis, umbellis multifloris, involucro polyphylo, tubo nectarifero calyce reflexo subtriplo longiore.

Pelargonium acidum. Swt. hort. brit. p. —. n. 17. inedit.

Root tuberous, almost stemless, or stem very short. **Leaves** embracing each other at the base, ovate, some entire, others trifid, more or less sinuate and toothed, rather succulent, smooth and glossy, of a sour taste like *Rumex acetosa*, or sorrel; teeth rounded, bluntly mucronate. **Petioles** nearly cylindrical, or slightly flattened on the upper side, thickly clothed with short white down, and a few longer hairs intermixed, dilated at the base. **Stipules** large, joined to the base of the petioles, ovately lanceolate, taper-pointed, generally toothed. **Scape** long, not much branched, leafy, thickly clothed with soft white hairs. **Peduncle** long, cylindrical, villosely hairy. **Involucre** of numerous linear taper-pointed bractes. **Pedicles** very short, scarcely any. **Calyx** 5-cleft, segments lanceolate, acute, all reflexed. **Nectariferous tube** nearly 3 times longer than the calyx, flattened and keeled on each side, a little gibbous at the base. **Petals** 5, spreading, of a dark velvet on a crimson ground: upper ones obovate, slightly emarginate, reticulately veined near the base; lower ones spatulately ligulate, rounded. **Filaments** 10, united at the base, 7 of them bearing anthers, which in our specimen were all sterile; one of the filaments a broad

spatulate one, which makes it belong to the same section as *P. sanguineum*. *Style* flesh coloured, pubescent near the base, and smooth upwards. *Stigmas* 5, pale red, reflexed.

A very curious hybrid production, raised at the Nursery of Mr. Colvill in 1823, from a seed of *P. sanguineum* that had been fertilized by the pollen of *Hoarea undulæflora*; its habit is nearer the latter parent, but its smoothness and the colour of its flowers are more like the former: nothing, we imagine, can surpass them in brilliancy when in full bloom; those are produced in succession from May to September, and sometimes later. Before the present plant flowered, we could scarcely believe that the number stick was right in the pot, it was so very different from its parent, but we are now convinced that it was quite correct. We have also seen another plant in flower, raised from seed collected at the same time, and from the same plant, that is still more singular; the petals are very narrow, and nearly black, with scarlet margins, and the habit of the plant is exactly that of *Hoarea*, but it still belongs to this section. Some other very curious plants, that were raised at the same time from seeds collected from the same parent, and have not yet flowered, are very singular; one in particular, has a leaf very like *P. echinatum*, and a succulent stem resembling *P. cortusæfolium*.

The present subject succeeds well in an equal mixture of turfy loam, peat, and sand, as already recommended for plants of this tribe, giving it scarcely any water in Winter, and none when in a dormant state. The best method of increasing it is by the little tubers from its roots.

HOAR

Radix

H. *radix*

Hoar

Syr

Polygonum

Hort.

Polygonum

Geranium





HOAREA rosea.**Rose-coloured Hoarea.**

H. rosea, acaule, foliis laciniato-lobatis obtusis dentatis tomentosis, scapo simplici longissimo, umbellis multifloris, petalis concoloribus inferioribus multo minoribus, tubo nectarifero calyce reflexo quadruplo longiore.

Hoarea rosea. *Swt. hort. brit. p. —. n. 62. inedit.*
Supra, fig. 1.

Pelargonium roseum. *DC. prodr. 1. p. 651. n. 31.*
Hort. Kew. ed. 2. v. 4. p. 161.

Pelargonium condensatum. *Pers. syn. 2. p. 227.*

Geranium roseum. *Andrews's reposit. t. 173.*

Root tuberous. **Stemless.** **Leaves** crowning the root, radiately spreading, sinuately lobed, very blunt, more or less toothed with blunt rounded teeth, and clothed with a white downy tomentum. **Petioles** furrowed on the upper side and rounded on the lower, clothed with soft spreading hairs, as are the scapes, pedicles, and calyx. **Scape** very long, simple, nearly cylindrical. **Umbel** compact, many flowered. **Involucre** of several linear, acute, fringed bractes. **Pedicles** short, about the length, or scarcely as long as the bractes. **Calyx** 5-cleft, segments lanceolate, the upper one erect, concave; the others reflexed. **Nectariferous tube** unequal in length, from 3 to 4 times as long as the calyx. **Petals** 5, of a bright rose colour, the 2 upper ones much the largest, obovate, slightly emarginate, a little recurved; lower ones spatulately oblong, obtuse, spreading. **Stamens** 10, united in a tube, 5 only bearing anthers. **Style** flesh-coloured, longer than the stamens. **Stigmas** 5, more or less reflexed.

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This beautiful species, which was raised from Cape seeds by Mr. Colvill, in 1792, has now, we believe, quite disappeared from all the collections of this country, although Mr. Colvill informs me that it grew very freely, and that he had once the greater part of a house filled with it; but at that time the Heaths were more in fashion than any other plants, so that it got neglected, and at last was lost altogether. We have published this figure, to induce collectors to try to introduce it again to this country, as it would certainly be a valuable acquisition. Mr. Colvill remembers several other very fine species, raised at the same time, which have never been published, one in particular that flowered with him in large panicles of yellow flowers, which he named *speciosissimum*; this, as well as most of the others, have now disappeared. Our figure was copied from an original drawing, done by the late Mr. Sydenham Edwards, and now in the possession of Mr. Colvill. We have added, at the bottom of our plate, a single flower of another very splendid plant, the *Geranium Grenvilliae* of Andrews, which has also been lost to our collections for some years, and which we propose as a distinct genus under the name of GRENVILLEA.

GRENVILLEA. *Calyx* 5-partitus: laciniis subæqualibus, suprema desinente in tubum nectariferum. *Corolla* 5-petala, irregularis: 2 superiora multo majora, longe unguiculata. *Filamenta* 10, basi connata: 4 antherifera declinata apice adscendentia. 6 sterilia abbreviata subulata recta.

G. conspicua, acaule, foliis spathulato-ovatis obovatisve grosse crenatis villosis, scapo longissimo subramoso, umbellis multifloris, petalis superioribus emarginatis, tubo nectarifero calyce subtriplo longiore.

Grenvillea conspicua. *Swt. hort. brit. p. —. inedit. Supra 262. f. 2.*
Geranium Grenvilliae. *Andrews geran. c. ic.*

This fine species is mentioned by Mr. Andrews as a native of Africa, near the Namaqua Land, and from thence was introduced, in 1810, by the Right Honourable Lord Grenville; we do not know that it ever was for sale at any of the Nurseries, and has now entirely disappeared.



S. D. Smith: del.

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J. Watts. sc.

HOAREA undulæflora.*Wave-flowered Hoarea.*

H. undulæflora, foliis hirsutis: inferioribus simplicibus rotundato-ovatis; superioribus trifidis ternatisque raro pinnatifidis, umbellis compositis multifloris, calycibus villosis apice barbatis, petalis undulatis patentibus.

Hoarea undulæflora. *Swt. hort. brit. p. —. n. 35. inedit.*

Root tuberous, divided into several crowns at the top. **Leaves** very variable, spreading in a radiate form, hairy: *lower ones* simple, roundly oval, very obtuse: *upper ones* ternate or trifid, the middle leaflet of the size and shape of the lower leaves, side ones much smaller, oblong, obtuse: *the leaves* at the base of the scape, pinnatifid. **Petioles** long and flexible, slightly flattened on the upper side and rounded on the lower, winged nearly half way up by the stipules, thickly clothed with unequal hairs, as are the scape and peduncles. **Stipules** attached to the petioles, the points subulate. **Scape** proceeding from the crown of the root, generally producing a small leaf and 3 or 4 bractes at the base of the peduncles. **Umbels** many-flowered. **Involucre** of several subulately linear villous bractes. **Calyx** 5-cleft, villous, and bearded with a little tuft of white hairs, segments linearly lanceolate with membranaceous margins, upper one erect, the others reflexed. **Nectariferous tube** slightly flattened, thickly covered with unequal hairs tipped with a white pellucid gland. **Petals** 5, the 2 uppermost widest, all narrowly spatulate, very much undulate, obtuse, spreading, from the middle reflexed, of a dark brown, or nearly black, with white unguis. **Filaments** 10, united into a tube; 5 fertile ones of nearly the

same length, the uppermost rather shortest, all bearing perfect anthers: barren ones very short, and curved inwards. *Pollen* orange-coloured. *Germen* villous. *Style* pale flesh-coloured, very hairy. *Stigmas* 5, revolute.

Several plants of the present species were received from the Cape, by Mr. Colvill, about four years ago, and they have continued to grow and flower freely ever since. We were at first inclined to consider them as varieties of *H. dioica*, but we are now convinced that they are perfectly distinct both from that species and *H. melanantha*. Several very curious mules have also been raised from them at Mr. Colvill's Nursery. Like the rest of its tribe, it succeeds well in a mixture of light turfy loam, peat, and sand, keeping it dry when in a dormant state; and it is readily increased by seeds, or by the little tubers of its roots.



G. D. Smith. del.

Pub by J. Ridgway 160 Piccadilly June. 1. 1825.

J. Watts. sc.

PELARGONIUM Scottii.

Sir Claude Scott's Stork's-bill.

P. Scottii, caule fruticoso ramoso: ramis patentibus villosis, foliis cordatis quinquelobis undulato-plicatis utrinque hirsutis margine incurvis, stipulis ovatis margine recurvis, umbellis plurifloris, tubo nectarifero calyce villosa subæquali v. paulo longiore.

Pelargonium Scottii. Swt. hort. brit. p. —. n. 335. inedit.

Stem shrubby, much branched: *branches* spreading, rather slender, thickly clothed with long spreading villous unequal hairs, as is every other part of the plant except the corolla. *Leaves* cordate, deeply 5-lobed, strongly and numerously nerved underneath, margins much curled and plaited, bent inwards, unequally toothed with rigid rounded teeth; sinuses rounded, often overlapped. *Petioles* short and stout, flattened on the upper side and rounded on the lower, thickened at the base. *Stipules* ovate, acute, sometimes toothed, ciliate, margins reflexed. *Umbels* several flowered. *Peduncle* cylindrical, swollen at the base. *Involucre* of 6 lanceolate acute villous bractes, their margins recurved. *Pedicles* about the length of the bractes. *Calyx* 5-cleft, segments lanceolate, acute, strongly veined, the upper one erect, the others reflexed. *Nectariferous tube* about the length of, or a little longer than the calyx, much flattened on each side, and gibbous at the base. *Petals* 5, the 2 upper ones ovate, oblique at the base, of a bright scarlet, with a dark purple spot in the centre, betwixt it and the base are several slightly branched purple lines; lower ones ligulate, spreading, of a lighter colour. *Filaments* 10, united at the base, 7 bear-

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ing anthers, which are seldom perfect. *Style* purple, hairy at the base, and smooth upwards. *Stigmas* 5, purple, reflexed.

This fine plant is of hybrid origin, and was raised in 1822, at the Nursery of Mr. Colvill, from a seed of *P. Murryanum*, that had been fertilized by the pollen of *P. ignescens*, and it is as near as possible intermediate; we have named it in compliment to Sir Claude Scott, a distinguished Horticulturist, and a liberal promoter of the Science of Botany.

Like its nearest allies, the present plant succeeds well in a mixture of light turfy loam, peat, and sand, and requires to be kept in a warm light situation in Winter, at which season it requires but little water; its best season of flowering is in Summer, and early in Autumn, the Spring flowers not being near so large. Cuttings strike root without difficulty, planted in pots in the same sort of soil, and placed on a shelf in the greenhouse.





D. Smith del.

Pub by J. Ridgway 169 Piccadilly July 1. 1825.

J. White sc.

PELARGONIUM signatum.*Marked-leaved Stork's-bill.*

P. signatum, caule fruticoso ramoso; ramis gracilibus erecto-patentibus villosis, foliis cordatis oblongis acutis 5-7-lobis acute dentatis piloso-pubescentibus: lobis planis divaricatis acutiusculis, stipulis cordato-ovatis acuminatis, umbellis 4-6-floris, tubo nectarifero calyce subæquali.

Pelargonium signatum. *Swt. hort. brit. p. —. n. 322. ined.*

Stem shrubby, branching, of a woody texture: *branches* slender, erect or slightly spreading, thickly clothed with long, spreading, villous, unequal hairs, as are the petioles, peduncles, bractes, and calyx. *Leaves* cordately oblong, acute, flat or slightly waved, 5 or 7 lobed, toothed with numerous sharp rigid teeth, covered on both sides with a hairy pubescence, roughish and slightly viscid, marked in the centre with a dark brown mark, sometimes much stronger than at others; lobes broad, distant, divaricately spreading, acute. *Petioles* long and slender, flattened on the upper side and rounded on the lower, widened at the base. *Stipules* cordately-ovate, taper-pointed, fringed. *Peduncles* cylindrical, 4 to 6-flowered. *Involucre* of 6 ovate or lanceolate acute fringed bractes, all united at the base. *Pedicles* unequal in length, some not so long, others longer than the bractes. *Calyx* 5-cleft, segments broadly lanceolate, acute, the upper one largest, erect; the others reflexed. *Nectariferous tube* about the length of the calyx, flattened on

each side and gibbous at the base. *Petals* 5, the 2 upper ones broadly cuneate, of a reddish pink, marked at the base with numerous branching purple lines, lower ones narrower, of a pale pink. *Filaments* 10, united at the base, hairy, 7 bearing perfect anthers. *Style* purple, slightly hairy at the base, and smooth upwards. *Stigmas* 5, purple, reflexed or revolute.

This pretty plant is of hybrid origin, and appears to be intermediate between *P. glutinosum* and perhaps *P. rubescens*, but it is quite impossible to speak with any degree of certainty. It was raised from seed by Mr. Smith, in the collection of the Earl of Liverpool at Coombe Wood: it is a very distinct plant from any other, and is one of the earliest flowering sorts, which makes it the more desirable. *P. chrysanthemifolium*, *P. Palkii*, and the present plant, we observed this Spring in full flower, for nearly a month before any of the other sorts began to bloom, which we consider very well worth noticing. The present plant is of free growth, though it never attains a large size, but makes a nice compact bush; it is also amongst the hardiest of the red flowered tribe, and thrives well in a mixture of sandy loam and peat. Cuttings strike root readily planted in pots in the same kind of soil, and placed in a sheltered situation.





E. D. Smith. del. Bot. by J. Ridgway 169 Piccadilly July. 1. 1825.

J. Wallis sc.

CAMPYLIA *variegata*.*Variegated-flowered Campylia.*

C. variegata, caule suberecto ramoso; ramis patentibus, foliis ovalibus undulatis inæqualiter dentatis apice truncatis tomentoso-velutinis, stipulis ovatis acutis, pedunculis paniculatis, umbellis 3-5-floris, petalis superioribus rotundatis inferioribus ovato-oblongis, tubo nectarifero brevissimo calyce duplo brevior.

Campylia variegata. *Swt. hort. brit. p. —. n. 2. ined.*

Stem shrubby, nearly erect, branching; branches spreading, thickly clothed with dense wool, and short reflexed hairs. *Leaves* oval, rounded at the base, sometimes auriculate, the point truncate, toothed with numerous unequal short bluntish teeth, strongly and numerously nerved, the nerves much branched, thickly clothed on both sides with short close pressed silky hairs, which gives them a velvety appearance. *Petioles* long and slender, slightly flattened on the upper side, and rounded on the lower. *Stipules* ovate, taper-pointed, keeled, clasping the stem, sometimes bifid. *Peduncles* panicled, thickly clothed with short tomentum, and small hairs intermixed. *Umbels* 3 to 5-flowered. *Involucre* of six bractes, all united at the base; bractes short, ovate, obtuse, fringed. *Pedicles* long and spreading, bent near the flower, thickly clothed with unequal spreading hairs. *Calyx* 5-cleft, segments erect, ovate, obtuse, concave, keeled at the back, with red margins, villous, bearded at the points. *Petals* 5, the 2 upper ones broad, nearly round or slightly emarginate, eared just above the short unguis, beautifully variegated with white and purple, with a dark velvet patch at the base;

lower ones of an oblong oval, of a bright lilac, with a purple spot at the base. *Stamens* 10, united at the base, 5 bearing anthers, which in our specimens were all imperfect, 2 upper sterile ones, elongated and recurved, of a dark purple. *Style* clothed at the base with unequal, spreading hairs, the upper part smooth. *Stigmas* 5, purple, reflexed.

This very handsome plant is a hybrid production, and is intermediate between *C. cana* and *C. holosericea*; it was raised at the Nursery of Mr. Colvill from seed, in 1823, and flowered this Spring for the first time, and we consider it the most beautiful plant of the tribe that has yet been raised; like its relatives, it grows freely in a mixture of turfy loam, peat, and sand; and cuttings strike root readily, if taken off in the young wood, and planted in pots in the same sort of soil, and placed on a shelf in the greenhouse.





PELARGONIUM delicatum.

Delicate Stork's-bill.

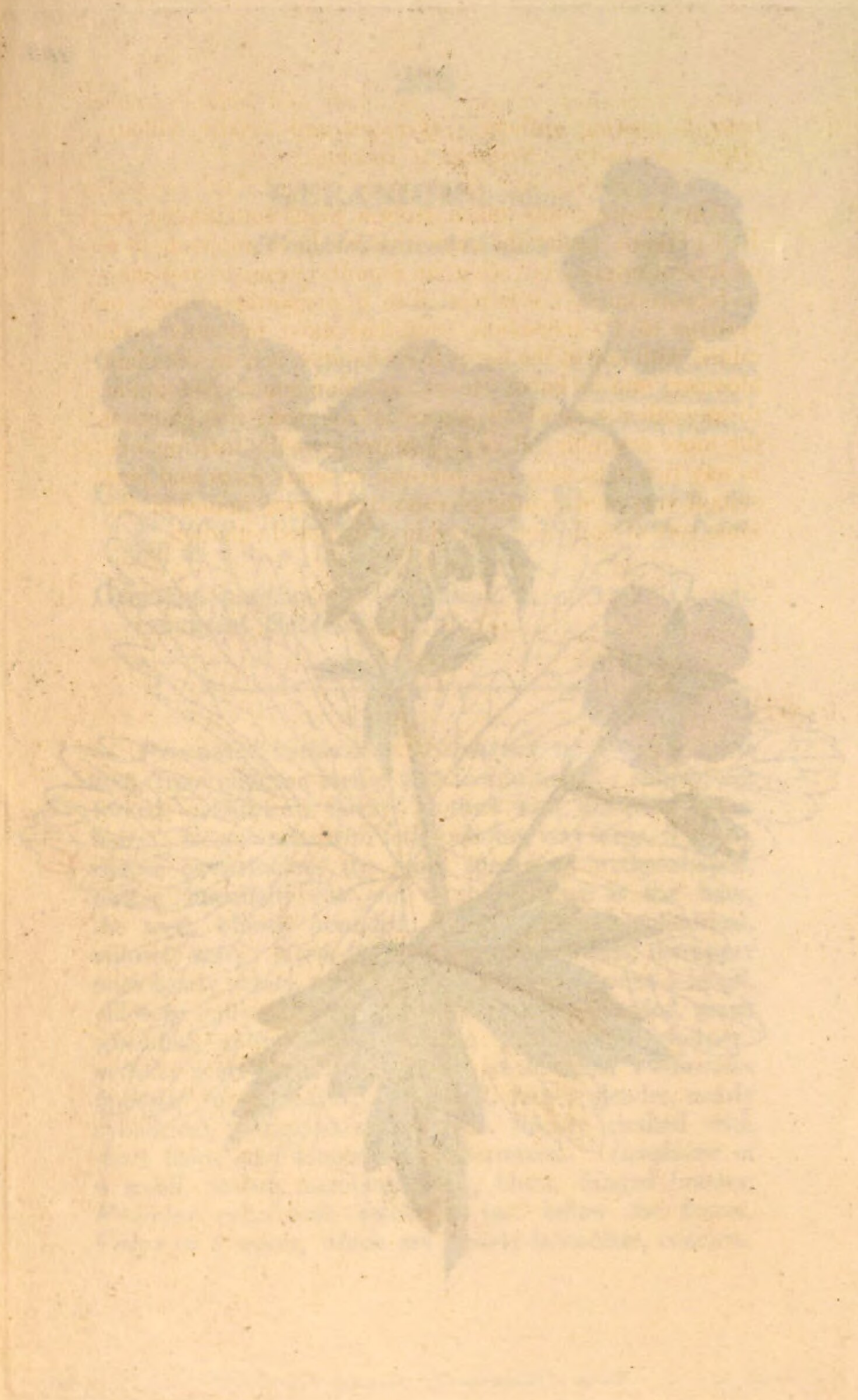
P. delicatum, caule erecto ramoso: ramis patentibus, foliis cuneatis 5-lobis incisiss dentatis planis, pedunculis 2-3-floris, petalis patentibus inferioribus spatulato-ligulatis, tubo nectarifero calyce longiore.

Pelargonium delicatum. *Hoare Mss. Colv. catal. ed. 2. p. 23. col. 2. Swt. hort. brit. p. —. n. 237. ined.*

Stem shrubby, very much branched: *branches* weak and slender, scarcely strong enough to support their own weight when grown long and in flower, which often causes them to be bent and crooked, thickly clothed with soft villous hairs, as are the petioles, peduncles, and calyx. *Leaves* flat, wedge-shaped, 5-lobed, incised and toothed with pointed teeth; lower lobes deep and spreading; upper ones shallow. *Petioles* flattened and channelled on the upper side and convex on the lower, dilated at the base. *Stipules* ovately lanceolate, oblique, broad at the base, taper-pointed and ciliate. *Peduncles* slender, 2 to 3-flowered. *Involucre* of, from 4 to 6 narrow, subulately-linear, taper-pointed, fringed bractes. *Pedicles* long and slender, unequal in length. *Calyx* 5-cleft, segments lanceolate, acute, the upper one erect, the others spreading. *Nectariferous tube* unequal in length, sometimes double the length of the calyx, at other times but little longer, flattened and furrowed on each side. *Petals* 5, unguiculate, the 2 upper ones obovate, oblique at the base, of a rosy lilac, with a dark purple spot in the centre, and several dark lines branching from it: lower petals spatulately ligulate, of a lighter colour. *Filaments* 10, united at the

base, 7 bearing anthers. *Germen* and *aristæ* villous.
Style very hairy. *Stigmas* 5, revolute.

Our drawing was taken from a plant sent us by Sir R. C. Hoare, under the name that we have adopted; it is of hybrid origin; but what its parents were, is not easy to be ascertained; it is related to *P. hermannifolium*, or perhaps to *P. ternatum*, and has most probably been mixed with one of the larger leaved sorts; it is an abundant bloomer, and its habit, leaves, and flowers, are dissimilar to any other with which we are acquainted; this makes it the more desirable; it is also of free growth, thriving well in any rich light soil, or a mixture of sandy loam and peat suits it very well; cuttings soon strike root, potted in the same sort of soil, and placed in a sheltered situation.





GERANIUM lividum.*Wrinkled-leaved Cranes-bill.*

G. lividum, caule simplici tereti erecto, foliis radicalibus novemlobis: lobis patentibus obtusis inciso-dentatis; caulinis 5-7-lobis acutis, calycibus simplicibus pilosis, petalis planis margine undulatis.

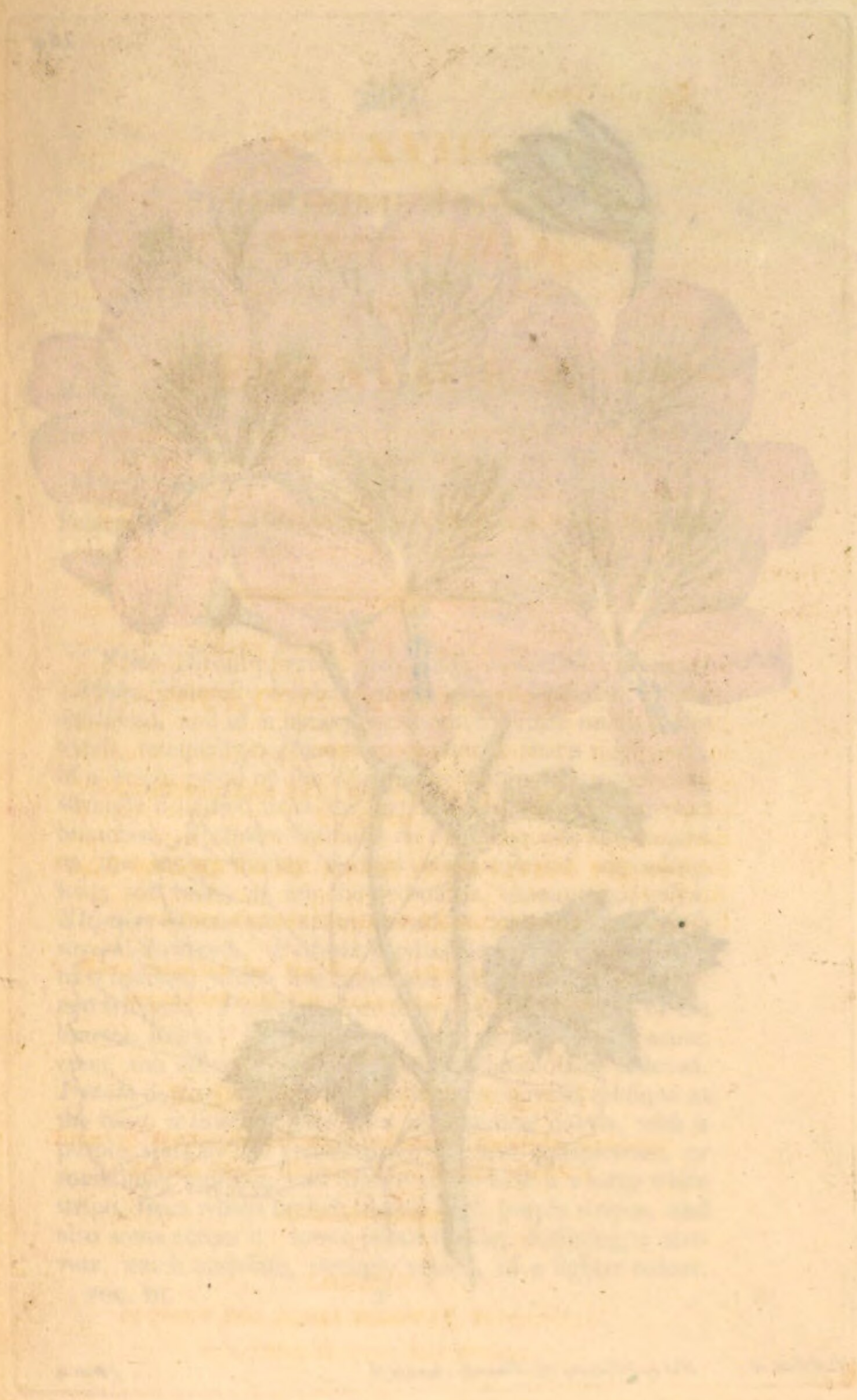
Geranium lividum. *L'Herit. ger. t.* 39. *Willden. sp. pl.* 3. p. 701. *Pers. syn.* 2. p. 235. *Hort. Kew. ed.* 2. v. 4. p. 186.

Geranium patulum. *Vill. dauph.* 3. p. 371. *G. subcæruleum.* *Schleich. cat.* 25.

Perennial, herbaceous. *Stems* several from the same root, from eighteen inches to 3 feet in height; simple, not forked, cylindrical, thickly clothed with unequal villous hairs. *Root-leaves* with long petioles, very large, 9-lobed, rugose or wrinkled, the lobes spreading, wedge-shaped, obtuse, unequally cut and toothed, entire at the base, the teeth bluntly rounded: *petioles* nearly cylindrical, villosely hairy: *Stem-leaves* on shorter petioles, the upper ones nearly sessile, lower ones 7-lobed, upper ones 5-lobed, villosely hairy on both sides, lobes deeply divided, much spreading, more acute, and the teeth rather sharper: *petioles* nearly cylindrical, swollen at the base. *Peduncles* opposite to the leaves, 2-flowered, rather slender, nearly cylindrical, thickened at the base, thickly clothed with short hairs, and longer ones intermixed. *Involucre* of 4 small, oblong, membranaceous, blunt, fringed bractes. *Pedicles* cylindrical, thickened just below the flower. *Calyx* of 5 sepals, which are ovately-lanceolate, concave,

bluntish, and terminated by a very short blunt point, clothed with spreading villous hairs. *Petals* 5, roundly obcordate, flat, with undulate margins, slightly emarginate, of a bluish lilac, lighter toward the base, where they are streaked with light blue. *Stamens* 10, all fertile, united at the base, *filaments* dilated downwards, fringed with long hairs near the base, and smooth upwards. *Style* green, slightly pubescent. *Stigmas* 5, spreading. *Car-pella* 5, very hairy, transversely ribbed.

This fine herbaceous perennial has been considered by some authors as a variety of *G. phæum*, from which we consider it as distinct as any species in a natural genus had need be; this, as far as we have observed, always produces long simple stems, whereas, those of *G. phæum* are always forked; this is also a much stronger growing plant, its leaves are larger, more divided, and more pubescent; besides other distinctions, whether *G. fuscum* be as distinct or not, we have not yet ascertained, but when growing together they appear to us very different; the present plant is a very fine hardy perennial, thriving well in the open ground, in the common garden soil, where it continues to bloom for a considerable time, and ripens plenty of seed, by which it may be readily increased; it may also be propagated by dividing at the root. Our drawing was taken from a plant communicated by Mr. Anderson, from the Garden belonging to the Apothecaries' Company at Chelsea, in May last.





E. D. Smith del.

Pub. by J. Ridgway 169 Piccadilly Aug 1. 1825

J. Watts sc.

PELARGONIUM Couttsiæ.

Mrs. Coutts's Stork's-bill.

P. Couttsiæ, foliis cordatis subtrilobis undulatis inæqualiter et rigide dentatis pubescentibus, umbellis plurifloris, calycibus reflexis, petalis inferioribus obovato-oblongis undulatis, tubo nectarifero calyce parum longiore.

Pelargonium Couttsiæ. *Swt. hort. brit. p. —. n. 293.*

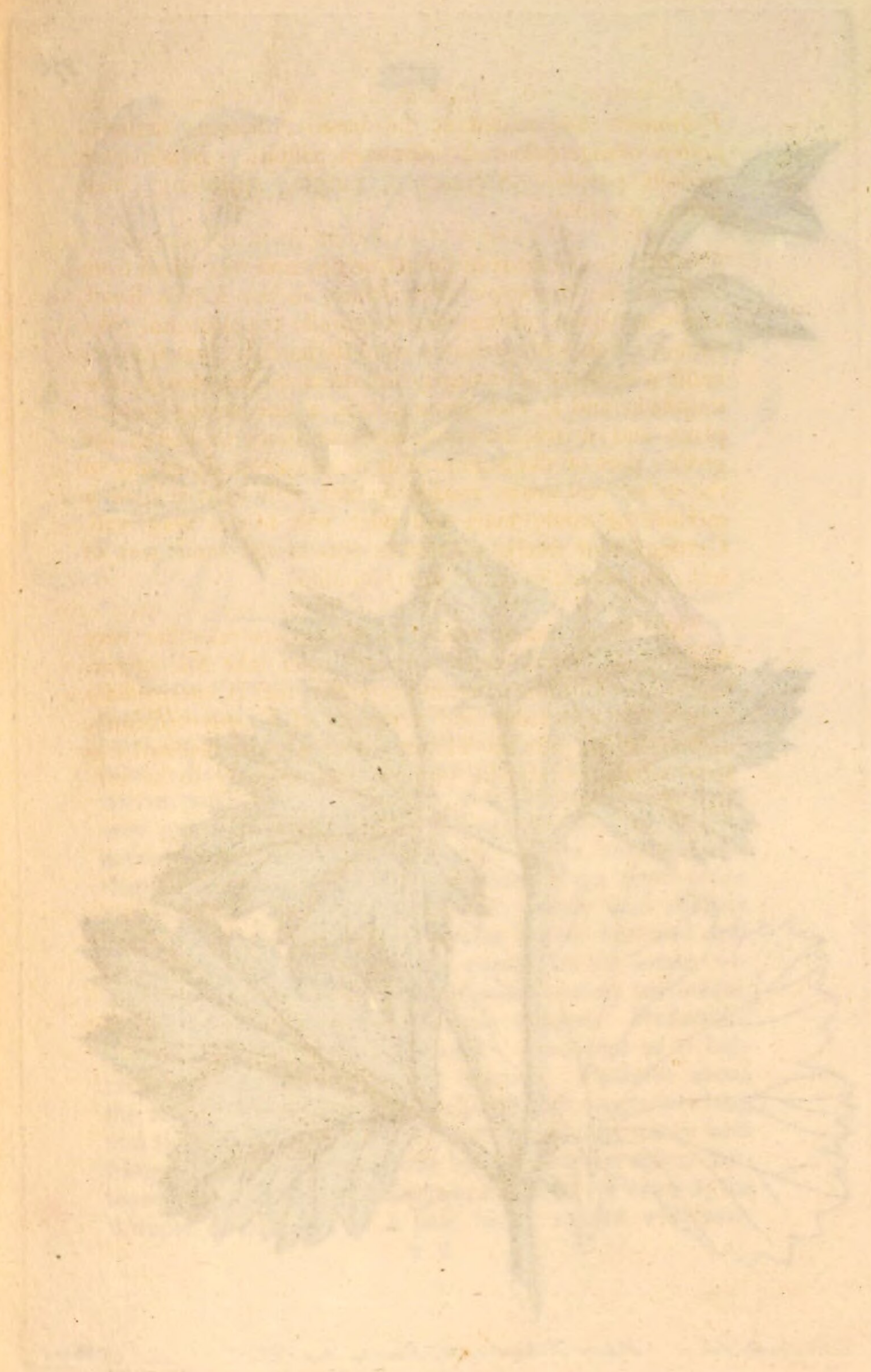
Stem shrubby, erect, not much branched. *Leaves* cordate, generally 3-lobed, more or less undulate, rather succulent, and of a greasy appearance, rather rough to the touch, unequally toothed with numerous sharp rigid teeth, of a bright green on the upper side and paler underneath, strongly 3-nerved from the base, the nerves more or less branched. *Petioles* flattened on the upper side and convex on the lower, thickly clothed with unequal, spreading, long, soft hairs, as are the peduncles, bractes, and calyx. *Stipules* lanceolate, acute, broad at the base. *Umbels* several-flowered. *Peduncle* cylindrical. *Involucre* of 6 to 9 bractes, which are imbricate, ovate, acute, concave, and fringed. *Pedicles* more than double the length of the bractes, hairy. *Calyx* 5-cleft, upper segment ovate, acute, erect, the others unequal, oblong or lanceolate, reflexed. *Petals* 5, the 2 upper ones oblongly-obovate, oblique at the base, a little rugged, of a red salmon colour, with a purple spot in the centre more or less conspicuous, or sometimes wanting, and from it to the base is a large white stripe, from which branch several dark purple stripes, and also some across it: lower petals oblong, inclining to obovate, much undulate, strongly veined, of a lighter colour.

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Filaments 10, united at the base, 7 bearing anthers: *pollen* orange-coloured. *Germen* villous. *Style* quite smooth, purple. *Stigmas* 5, purple, spreading, their points revolute.

This fine plant is of hybrid origin, and was raised from seed, at the Nursery of Mr. More, in the King's Road, Chelsea, where our drawing was made last Autumn. We cannot speak with precision as to its parents; but from its habit it appears to be nearly intermediate between *P. triumphans* and *P. rubescens*: it is a fine strong-growing plant and a free flowerer, and continues to bloom the greater part of the Summer; it is also as hardy as any of the tribe, and grows readily in any rich light soil, or a mixture of sandy loam and peat will suit it very well. Cuttings root freely, planted in pots in the same sort of soil, and placed in a sheltered situation.

Mr. More has succeeded in raising several other very fine hybrid sorts, which we shall soon take the opportunity of publishing; one in particular, that is intermediate between *P. ignescens* and a variety of *P. quercifolium*, and which he calls his Victory, is of a most brilliant colour, which we should suppose was scarcely to be surpassed.





C. D. Smith. del.

Pub. by J. Ridgway 169 Piccadilly Aug. 1/1825.

J. Watts. sc.

PELARGONIUM Belladonna.*Smith's painted lady Stork's-bill.*

P. Belladonna, caule fruticoso erecto ramoso, foliis planis basi trinerviis acute serrato-dentatis glabriusculis: inferioribus reniformibus quinquelobis; superioribus cuneatis 3-5-lobis acutis, umbellis 3-5-floris, petalis superioribus ovatis calyce duplo longioribus, tubo nectarifero calyce acuto paulo longiore.

Pelargonium Belladonna. *Swt. hort. brit. p. —. n. 278.*

Stem shrubby, erect, branching: *branches* spreading, glossy, thickly clothed with long unequal spreading white hairs, as are the petioles, peduncles, and nectariferous tube. **Leaves** flat, strongly three-nerved at the base, the nerves much branched, deeply and sharply toothed with very unequal sharp rigid teeth, smooth and glossy, the nerves and margins a little hairy: lower ones kidney-shaped, 5-lobed, rather broader than long: upper ones wedge-shaped, acute, 3 to 5-lobed, deeply and sharply toothed, slightly fringed. **Petioles** broad, flattened and furrowed on the upper side, and convex on the lower, widened at the base and point. **Stipules** ovately lanceolate, acute, sometimes toothed, densely fringed. **Peduncles** long and slender, 3 to 5-flowered. **Involucre** of 6 lanceolate, taper-pointed, fringed bractes. **Pedicles** about the length of the bractes. **Calyx** 5-cleft, segments long and slender, lanceolate, taper-pointed, slightly hairy and fringed. **Nectariferous tube** longer than the calyx, flattened on each side and gibbous at the base. **Petals** 5, the 2 upper ones ovate, of a pale blush, shaded with rose,

and a faint rosy patch in the centre, and many purple lines below it, more or less branched; lower ones oblong, obtuse, nearly white. *Filaments* 10, united at the base, 7 bearing anthers. *Style* flesh-coloured, hairy below, and smooth upwards. *Stigmas* 5, purple, revolute.

This pretty plant is also a hybrid production, and was raised from seed by Mr. Smith, at the Earl of Liverpool's Garden, Coombe Wood; it is one of the lateral descendants of *P. grandiflorum*, that has probably been muled for several generations, so that it would be quite impossible to speak with certainty as to its origin; in habit and character it comes nearest to *P. amplissimum* of any we know described; but there are plenty of distinguishing marks to keep it distinct from all with which we are acquainted; its colours are variable, and very pleasing; it is also a very free grower, and its flowers are produced in abundance. It succeeds well in any rich light soil, or a mixture of turfy loam and peat will suit it very well. Cuttings strike root freely, planted in pots in the same sort of soil, if placed in a sheltered situation.

Drawn from a strong plant in the select collection of R. H. Jenkinson, Esq. last Autumn, at which season the flowers are in the greatest perfection.

Stems shrubby, thickly clothed with long unequal spreading white
glossy, thickly clothed with long unequal spreading white
nerves much branched, very unequal sharp rigid teeth, smooth and glossy, the
nerves and margins a little hairy: lower ones kidney-
shaped, 5-lobed, rather broader than long: upper ones
wedge-shaped, acute, 3 to 5-lobed, deeply and sharply
toothed, slightly tinged. Petioles broad, flattened and
curved on the upper side, and convex on the lower, wi-
dened at the base and point. Stipules ovately lanceolate,
acute, sometimes toothed, densely tinged. Peduncles
long and slender, 3 to 5-flowered. Involucres of 6 lan-
ceolate, taper-pointed, fringed bracts. Pedicels about
the length of the bracts. Ovary 5-lobed, segments long
and slender, lanceolate, taper-pointed, slightly hairy and
fringed. Nectary-tube longer than the calyx, flat-
tened on each side and gibbous at the base. Petals 5, the
upper ones ovate, of a pale blush, shaded with rose,

GERANIUM



Geranium...
 Pers. ...
 Jacq. coll. 1. p. 238. ...
 p. 212. t. 95. *Silva bot.* ...



E. D. Smith del.

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J. Watts sc.

GERANIUM *macrorhizon*.*Long-rooted Crane's-bill.*

G. macrorhizon, caule basi suffruticoso apice dichotomo, foliis glabris 5-partitis: lobis apice dentatis, calycibus globoso inflatis, petalis integris, staminibus nutantibus. *DC. prodr. syst. nat.* 1. p. 640.

Geranium macrorhizum. *Willden. sp. pl.* 3. p. 699.
Pers. syn. 2. p. 235. *Hort. Kew. ed.* 2. v. 4. p. 185.
Jacq. coll. 1. p. 258. *Ic. rar.* 1. t. 134. *Cav. diss.* 4. p. 212. t. 25. *Sims bot. mag.* 2420.

Stem suffrutescent at the base, often a foot in length and branched, scaly. *Leaves* peltate, deeply 5 or 7-parted, smoothish above, densely pubescent underneath; segments deeply toothed, with blunt rounded teeth terminated with a small mucro: *upper leaves* 3-parted, slightly toothed. *Petioles* long, slightly flattened on the upper side and rounded on the lower, swollen at the base, attenuated upwards, slightly pubescent. *Stipules* lanceolate, keeled, mucronate. *Flower-stem* dichotomous, pubescent, of a purplish colour, longer than the leaves. *Peduncles* clustered, dichotomously paniced, 2-flowered. *Bractes* 4, very short, lanceolate, pointed. *Pedicles* short, hairy. *Calyx* globular, inflated: *sepals* 5, unequal in size, strongly 3-ribbed, purplish, mucronate. *Petals* 5, spreading or reflexed, roundly obovate, entire, of a reddish purple, reticulately veined with lighter veins. *Stamens* 10, all bearing anthers, very long, declining, remaining some time after the petals are dropt. *Style* longer than the stamens, smooth, purple. *Stigmas* 5, purple, spreading.

This fine hardy perennial plant is a native of the South of Europe, and differs from most others of the genus by its long filaments, and its suffruticose stem, which approaches to *G. anemonefolium*: it thrives well in almost any soil or situation, but it grows strongest in a rich light ground, where it produces an abundance of flowers, from May to July; it also ripens plenty of seeds, by which it is readily increased. We believe, with a little pains, that some handsome and interesting mules might be raised in this genus, which would be well worth the trouble, as they would all prove hardy, and be an acquisition to our flower gardens. Our drawing was taken from a plant given us by Mr. William Anderson, Curator of the Apothecaries' Garden at Chelsea.

Stems suffrutescent at the base, often a foot in length and branched, scaly. Leaves peltate, deeply 5 or 7 parted, smoothish above, densely pubescent underneath; segments deeply toothed, with blunt rounded teeth terminated with a small mucro: upper leaves 2-parted, slightly toothed. Petioles long, slightly flattened on the upper side and rounded on the lower, swollen at the base, attenuated upwards, slightly pubescent. Stipules lanceolate, keeled, mucronate. Flower-stem dichotomous, pubescent, of a purplish colour, longer than the leaves. Bracts clustered, dichotomously parted, 2-flowered. Bracts 4, very short, lanceolate, pointed. Petioles short, hairy. Ovary globose, inflated: sepals 5, unequal in size, strongly 5-ribbed, purplish, mucronate. Petals 5, spreading or reflexed, roundly obovate, entire, of a reddish purple, reticulately veined with lighter veins. Stamens 10, all bearing anthers, very long, declining, retaining some time after the petals are dropped. Style longer than the stamens, smooth, purple. Stigmas 2, purple, spread-





E. D. Smith del.

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PELARGONIUM Bishopæ.

Mrs. Bishop's Stork's-bill.

P. Bishopæ, caule erecto ramoso: ramis patentibus villosissimis, foliis cordatis profunde 5-7-lobis rotundato-obtusis undulatis crenatis hirsutis, umbellis subquinquefloris, pedunculis calycibusque villosis, calycibus reflexis, petalis omnibus obovatis, tubo nectarifero calyce subæquali aut parum longiore.

Pelargonium Bishopæ. *Swt. hort. brit. p. —. n. 321.*

Stem shrubby, of a woody texture, upright, much branched: *branches* spreading, very thickly clothed with unequal spreading, white, villous hairs. *Leaves* cordate at the base, oblong, roundly obtuse, more or less undulate, deeply 5 or 7-lobed, more or less notched with round shallow notches, strongly nerved underneath, the nerves much branched, hairy on both sides: lobes rounded, spreading, sometimes imbricate: the upper leaves and their lobes more acute, and clothed with longer hairs, of a darkish green colour. *Petioles* much flattened on the upper side and convex on the lower, widened at the base, thickly clothed with unequal spreading villous hairs. *Stipules* short, cordate, acute, villous, the margins reflexed or revolute. *Umbels* generally 5-flowered. *Peduncles* short and stout, cylindrical, a little swollen at the base, thickly clothed with unequal villous hairs, as are the bractes, pedicles, and calyx. *Involucre* of 6 ovate, acute, imbricate, fringed bractes. *Pedicles* short, about the length of, or a little longer than the bractes. *Calyx* 5-cleft, segments broadly lanceolate, scarcely acute, the upper one broadest, erect, keeled, the others reflexed. *Necta-*

riferous tube about the length of, or a little longer than the calyx, much flattened and furrowed on each side, gibbous at the base, villosely hairy. *Petals* 5, all obovate, the 2 upper ones rather largest, slightly emarginate, oblique at the base, of a deep bright scarlet, with a dark purple spot in the centre, and numerous dark lines below it, which branch in various directions; lower petals of a lighter colour. *Filaments* 10, united at the base, 7 bearing anthers. *Style* flesh-coloured, all over hairy. *Stigmas* 5, purple, reflexed.

This very beautiful plant is a hybrid production, and is intermediate between *P. ignescens major* and *P. quercifolium*, partaking in an equal degree of both; the shape and size of the flowers, and also the form of the leaves, are nearer the latter parent; but the brilliant colour of the flowers is that of the former. We have named it in compliment to Mrs. Bishop, of Dorking, Surrey, in whose collection it was raised from seed. We are informed that it is in fine bloom at Messrs. Young's Nursery at Epsom, said to be much finer than the specimen from which our drawing was made; it is a free bushy growing plant, and flowers continually all through the Summer and till late in Autumn; it is therefore a very desirable plant for all collections. A mixture of turfy loam, peat, and sand, is a very good soil for it; and young cuttings strike root freely, planted in pots in the same sort of soil, and placed on a shelf in the greenhouse.

IXIX

HOLOMISMA

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E. D. Smith del.

Printed by J. Ridgway 70 Piccadilly Sep. 1. 1825.

J. W. Waller sc.

MONSONIA lobata.*Broad-leaved Monsonia.*

M. lobata, foliis cordatis 5-7-lobis: lobis obtusis serrato-dentatis subtus petiolis calycibusque pilosiusculis.

Monsonia lobata. *DC. prodr.* 1. p. 638. *Willd. sp. pl.* 3. p. 718. *Botan. magaz. t.* 385.

Stem herbaceous, or scarcely suffruticose, rather succulent, 2 or 3 forked, generally very crooked, procumbent if not supported. *Leaves* cordate or cordately ovate, 5 or 7-lobed, smooth and glossy on the upper side, and slightly hairy underneath, strongly 5-nerved, the nerves branched: lobes blunt, serrately toothed, with small rather bluntish teeth. *Petioles* nearly cylindrical, long and slender, slightly hairy. *Stipules* lanceolate, acute, slightly fringed. *Peduncles* very long, cylindrical, clothed with short unequal hairs, all tipped with a small gland. *Involucre* of 6 narrowly lanceolate, taper-pointed, keeled, and fringed bractes. *Calyx* of 5 sepals, connected at the base, or more properly of one sepal deeply 5-parted. *Sepals* nearly equal, lanceolate, acute, 3-nerved, with membranaceous margins. *Petals* 5, widely spreading, not imbricate, obovate, with a longish unguis, deeply 5-toothed, the teeth bluntish, underneath of a greenish yellow, marked with 5 longitudinal purple lines that are slightly branched; upper side of a pale blush, redder near the base. *Stamens* 15, in 5 sets, 3 in each, all connected at the base, and surrounding the stigmas: *filaments* dark purple, flattened and fringed: *pollen* orange-coloured. *Stigmas* 5, dark purple, revolute.

Our drawing of this ornamental plant was taken at the Nursery of Mr. Colvill, in June last; it is an old inhabitant of our gardens, having been introduced into them from the Cape, ever since the year 1774; but it is still far from being common, and is not so much cultivated as it deserves to be, probably from want of a proper mode of treatment. The best soil, to have it thrive and flower well, is an equal mixture of turfy loam, peat, and sand, and the pots to be well drained with potsherds broken small, or they will be liable to suffer with moisture in winter, at which season it requires but very little water; but in summer, when it is growing freely, it requires a constant supply. The best method of propagating it is by cuttings of the root, planted with their tops above the surface of the mould; those require no water for the first 2 or 3 days, until the wound is dried over; they must then be supplied with a little, and they will soon make nice young plants.

We have lately received seeds of *M. ovata* brought from the Cape by Mr. W. Synnet, who had been residing there, in the interior, for four years; we have also received from him seeds of that rare and little known plant, *Grielim laciniatum*, which we have long been wishing to procure, and plants of it are already growing; the styles in it were not hardened into a spine, as in *G. tenuifolium*, though they were very rigid and persistent; the calyx is also persistent and hardened, but not so much as in the latter species. From the same gentleman we have received both seeds and roots of several other curious Geraniaceæ, which we hope soon to flower, and to have an opportunity of publishing. Mr. Colvill has also procured from him a fine collection of bulbs, consisting of different species of *Gladiolus*, *Ixia*, *Moræa*, and other genera belonging to *IRIDEÆ*, *ASPHODELEÆ*, and *MELANTHACEÆ*; amongst them, we believe, there are some curious new genera.





E.D. Smith del.

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J. Walter sc.

PELARGONIUM polytrichum.*Many-haired Stork's-bill.*

P. polytrichum, foliis cordatis utrinque pilosis: inferioribus undulato-lobatis inæqualiter cartilagineo-dentatis, superioribus cuneato-cochleatis sublobatis inciso-dentatis, stipulis oblongis acutis subdentatis ciliatis, pedunculis plurifloris, tubo nectarifero calyce reflexo subæquali.

Pelargonium polytrichum. *Swt. hort. brit. p. —. n. 385.*

Stem shrubby, erect or a little flexuose, branching, thickly clothed with unequal long spreading villous white hairs, as is every other part of the plant, except the corolla. *Leaves* cordate, acute, hollow at the base; lower ones very large and spreading, very much undulate, obsoletely 5 or 7-lobed, flaccid, unequally toothed with numerous rigid cartilaginous teeth; strongly and numerously nerved underneath, the nerves branching: upper ones wedge-shaped or spoon-shaped, lobed or incised, deeply and sharply toothed with rigid unequal teeth. *Petioles* long, much flattened on the upper side, and convex on the lower. *Stipules* oblong or ovately lanceolate, taper-pointed, generally toothed, and fringed with numerous long spreading hairs. *Peduncles* long, cylindrical, several-flowered. *Involucre* cup-shaped, consisting of 6 or 7 broad ovate, acute, keeled bractes, some of which are frequently toothed. *Pedicles* longer than the bractes. *Calyx* 5-cleft, segments broadly lanceolate, acute, the upper one erect, the others reflexed. *Nectariferous tube* about the length of the calyx, flattened on each side, and gibbous at the base. *Petals* 5, the 2 upper ones obovate, oblique at the base,

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with a longish unguis, white, tinged with blush, and marked with a dense cluster of dark purple lines, terminated in lilac, which are much branched, and extend above half way over the petals; lower ones oblong, blunt, the margins slightly notched, or uneven, of a pure white. *Filaments* 10, united at the base, 7 bearing anthers. *Style* purple, all over hairy. *Stigmas* 5, purple, reflexed.

This pretty plant is of hybrid origin, and was raised from seed at the Nursery of Mr. More, in the King's Road, Chelsea, where our drawing was made in June last; one of its parents, we should suspect, was *P. involucratum maximum*, and the other, one of the smaller growing sorts; but it is not easy to determine with certainty the precise species. It is a free growing plant, and as hardy as any one in the genus; it is also a good flowerer, and thrives well in any rich light soil, or a mixture of turfy loam and peat will suit it very well. Cuttings will strike root freely, if planted in pots in the same sort of soil, and placed in a sheltered situation.

Potentilla fruticosa





E. D. Smith del

Printed by J. Rudgway 170 Piccadilly Sept. 1825

J. Watts sc

PELARGONIUM mucronatum.*Mucronated Stork's-bill.*

P. mucronatum, ramis subflexuosis patulis hirsutis, foliis subcordatis quinquelobis grosse dentatis glabris, pedunculis 3-5-floris, calycibus patentibus, tubo nectarifero calyce subæquali.

Pelargonium mucronatum. *Swt. hort. brit. p. —. n. 297.*

Stem shrubby, branching: *branches* spreading, flexuose, thickly clothed with short spreading hairs, and longer ones intermixed. *Leaves* slightly cordate at the base, 5-lobed, deeply and sharply toothed, with long sharp-pointed cartilaginous teeth, smooth and glossy, or very slightly pubescent, the margins slightly ciliate, underneath punctate with innumerable very minute dots, strongly nerved, the nerves not much branched. *Petioles* rather slender, nearly cylindrical, or a little flattened on the upper side, also unequally hairy. *Stipules* broadly lanceolate, taper-pointed, concave, hairy and fringed. *Peduncles* bent, unequally hairy, 3 to 5-flowered. *Involucre* of about 6 broadly lanceolate, concave, mucronate, hairy bractes. *Pedicles* scarcely longer than the bractes, villous. *Calyx* 5-cleft, segments very long, lanceolate, acute, of a brown colour, upper one rather broadest, erect, the others more or less spreading, villosely hairy. *Nectariferous tube* broad, and flattened on each side, gibbous at the base, about the length of the calyx, also irregularly hairy. *Petals* 5, the 2 upper ones obovate, oblique at the base, of a purplish red, with a large dark spot in the centre, and numerous dark purple lines branching nearly all over the petals; above the spot are lighter veins: lower petals

oblong, obtuse, of a bright lilac. *Filaments* 10, united at the base, 7 bearing perfect anthers. *Style* purple, hairy at the base, and smooth upwards. *Stigmas* 5, purple, fringed and revolute.

Also a hybrid production, raised from seed by Mr. W. Smith, at the Earl of Liverpool's, Coombe Wood; from its habit and appearance we should pronounce one of its parents to be *P. Smithii*, and the other *P. macranthon*, as it is exactly intermediate between the two. It is very distinct from any other sort with which we are acquainted, and is, in our opinion, as desirable a plant as any of the tribe, the colour of the flowers being different from all others; it is also a free strong growing sort, and produces a great abundance of bloom; a mixture of sandy loam and peat suits it very well; and cuttings strike root freely, planted in pots in the same kind of soil, and placed on a shelf in the greenhouse.





HOAREA labyrinthica.*Labyrinth-flowered Hoarea.*

H. labyrinthica, foliis piloso-canescens: inferioribus simplicibus ovatis ternatisque; superioribus pinnatifidis pinnatisque: foliolis segmentisque oblongo-ovatis oppositis alternisque utrinque pilosis canescens, scapo ramoso, umbellis multifloris, tubo nectarifero calyce reflexo sesquolongiore.

Hoarea labyrinthica. *Swt. hort. brit. p. —. n. 61.*

Root tuberous. **Stemless.** **Leaves** variable, hairy and canescent; lower ones simple and ovate, trifid or ternate; upper ones pinnatifid or pinnate: **leaflets** opposite and alternate, oblong or ovate, bluntish, hairy and canescent. **Petioles** slender, villosely hairy. **Stipules** lanceolate, acute, joined at the base of, and decurrent a good way up the petiole. **Scapes** branching, and producing several umbels of flowers, thickly clothed with soft unequal hairs, as are the peduncles, calyx, and nectariferous tube. **Peduncles** cylindrical. **Involucre** of several linear, acute, fringed bractes. **Umbels** many-flowered. **Pedicles** very short, or altogether wanting. **Calyx** 5-cleft, segments lanceolate, acute, upper one erect, concave, the others narrower and reflexed. **Nectariferous tube** about half as long again as the calyx. **Petals** 5, the 2 upper ones spatulately ligulate, reflexed from about the middle, much veined, the veins crossing each other, marked with a dark purple spot near the bend, which extends into some of the veins: lower ones narrower, of a lighter colour, and scarcely veined. **Filaments** 10, united at the base, 5 bear-

ing anthers : barren filaments bent inwards at the points. *Style* purple, thickly covered with short stiff hairs. *Stigmas* 5, purple, reflexed.

This neat little plant is of hybrid origin, and is the produce of *Dimacria pinnata* that had been fertilized by *H. reticulata*; it is related to *H. venosa*, already published by us, but is sufficiently distinct; it is an abundant flowerer, beginning to bloom in March, and continuing in flower till August; like the other plants of this genus, it succeeds best in an equal mixture of light turfy loam, peat, and sand, requiring no water when in a dormant state; but as soon as it shows an inclination to grow, it should be shifted into fresh mould, and as it grows, will need a constant supply of water; the best method of propagating it is by the little tubers of its roots.

Drawn at the Nursery of Mr. Colvill, last Autumn, where it was raised from seed in 1823.

Root tuberos. Leaves variable, hairy and
erect; lower ones simple and ovate, rigid or terete;
upper ones pinnatifid or pinnate; leaflets opposite and
alternate, oblong or ovate, bluntish, hairy and ciliate.
Petioles slender, villous hairy. Stipules lanceolate,
acute, joined at the base of, and decurrent a good way up
the petiole. Scapes branching and producing several
umbels of flowers, thickly clothed with soft unequal hairs,
as are the peduncles, calyx, and nectaries. Tube of
chamber cylindrical. Anthers of several linear, acute,
tinged purple. Umbels many-flowered. Petals very
short, or altogether wanting. Calyx 5-lobed, segments
lanceolate, acute, upper one erect, concave, the others
narrower and reflexed. Nectary-tube about half
as long again as the calyx. Petals 5, the 2 upper ones
apiculate, ligulate, reflexed from about the middle, much
veined, the veins crossing each other, marked with a dark
purple spot near the base, which extends into some of the
veins: lower ones narrower, of a lighter colour, and
scarcely veined. Filaments 10, united at the base, 5 bear-





E.D. Smith del.

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J. Walter sc.

PELARGONIUM affine.

Related Stork's-bill.

P. affine, caule fruticoso ramoso; ramis villosis, foliis cordatis undulato-lobatis rigidis cartilagineo-dentatis utrinque pilosis, stipulis ovatis acuminatis ciliatis, umbellis plurifloris subpaniculatis, tubo nectarifero calyce reflexo sesquilingiore.

Pelargonium affine. Colv. catal. ed. 2. p. 23. col. 2. Swt. hort. brit. p. 79. n. 103.

Stem shrubby, erect, branching: *branches* erect or slightly spreading, thickly clothed with unequal spreading villous hairs, as is every other part of the plant except the corolla. *Leaves* cordate, very much undulate, more or less lobed, rigid, and sharply toothed with brown cartilaginous teeth, fringed round the edges. *Petioles* a little flattened on the upper side, and convex on the lower, stoutest at the base. *Stipules* ovate, taper-pointed, undulate and fringed. *Peduncles* cylindrical, several-flowered, in a sort of panicle. *Involucre* of 6 ovately lanceolate, acute bractes. *Pedicles* about the length of the bractes, sometimes scarcely as long. *Calyx* 5-cleft, upper segment broadest, ovate, acute, erect; the others lanceolate and reflexed. *Nectariferous tube* about half as long again as the calyx, much flattened on both sides. *Petals* 5, the 2 upper ones obovate, very much oblique at the base, of a dark reddish scarlet, marked with a dark velvety patch in the centre, from which to the base are several short dark lines, more or less branched, the unguis white: lower petals ligulately oblong, of a lighter colour and much spreading. *Filaments* 10, united at the base, 7 bearing

anthers. *Germen* and *aristæ* villous. *Style* purple, with a few hairs near the base, the upper part smooth and glossy. *Stigmas* 5, purple, reflexed or revolute.

Our drawing of this plant was taken at the Nursery of Mr. Colvill, where it was raised from seed: it is of hybrid origin, and the seed was produced by *P. involucratum* & *lilacinum* that had been fertilized by *P. ignescens*; several plants that have been raised by the same parents, have all proved precisely the same, without the least variation; in the same manner as we have noticed by the produce of *P. Mostynæ* mixed with *P. ignescens*, which have invariably produced *P. flammeum*, without variation; we have noticed the same in several other mule productions, so that if any sort should happen to be lost by inattention or otherwise, it might be again raised, if its original parents are known.

The present plant is of very free growth, and an abundant bloomer, and continues to flower the greater part of the year; a mixture of turfy loam, peat, and sand, is a very proper soil for it; and cuttings root readily, planted in pots in the same sort of soil, and placed in a sheltered part of the Greenhouse.



Stem slightly spreading, branches erect
 or slightly spreading. Leaves short unequal
 lobed. *Lanceolatus* lobes broader
 than long, rounded, margin finely, unequally
 toothed. Petioles short, strongly nerved,
 the nerves branching. Stems with short
 hairs, of a plumbeous color. Leaves 2-lobed:
 upper one wider than lower one, rounded,
 petiole slightly reflexed. Lower one, acute,
 sometimes 3-lobed, lobes rounded, petiole
 short, rounded, lobes short unequal
 lobed. Petioles of lower lobes short, fringed
 with hairs. Upper lobes with the nerves
 clear, the lower lobes with the nerves
 upper lobes with the nerves clear, the
 others with the nerves, some with the
 fringed. *Nectariferous* tube long, slender,
 flared on each side, and glandular, hairy.
Petal 5, with long unguis, the lobes
 slightly oblique, of a bright red color, with
 a large velvety mark in the center. *Stamen* dark blue
 below it, and running through it, the filament branched.



E. D. Smith del

Pub by J. Ridgway 169 Piccadilly Dec^r 1. 1825.

J. Watts sc.

PELARGONIUM limonium.

Lemon-scented Stork's-bill.

P. limonium, caule fruticoso ramosissimo, foliis sparsis cordatis 3-5-lobis crispis: lobis divaricatis rotundato-cuneatis inæqualiter dentatis, pedunculis subtrifloris, calycibus reflexis, tubo nectarifero calyce longiore.

Pelargonium limonium. *Swt. hort. brit. p. 81. n. 252.*

Stem shrubby, very much branched: *branches* erect or slightly spreading, thickly clothed with short unequal hairs. *Leaves* scattered, cordate at the base, broader than long, 3 to 5-lobed, margins much curled, unequally toothed with short rigid teeth, underneath strongly nerved, the nerves branching, clothed on both sides with short hairs, of a pleasant scent like lemon: lower lobes divaricately spreading, roundly wedge-shaped, slightly 2-lobed: upper one widened upwards, more or less 3-lobed, the point slightly reflexed. *Stipules* small, cordate, acute, sometimes toothed, ciliate. *Peduncles* opposite to a leaf, cylindrical, 2 or 3-flowered, clothed with short unequal hairs. *Involucre* of 6 ovately-lanceolate, acute, fringed bractes. *Pedicles* longer than the nectariferous tube, clothed with short spreading unequal hairs. *Calyx* 5-cleft, upper segment ovate, acute, erect, slightly keeled, the others lanceolate, acute, reflexed, all of them hairy and fringed. *Nectariferous tube* longer than the calyx, much flattened on each side, and gibbous at the base, hairy. *Petals* 5, with long unguis, the two upper ones obovate, slightly oblique, of a bright lilac, tinged with purple, with a large velvety mark in the centre, and several dark lines below it, and running through it, more or less branched:

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lower ones narrowly spatulate, pale lilac. *Filaments* 10, united at the base, 7 bearing anthers: pollen orange-coloured. *Style* pale flesh-coloured, very hairy, but smooth upwards. *Stigmas* 5, bright purple, reflexed.

This pretty little plant is a hybrid production, and is related to *P. crispum*, or some of the Citron scented species; but what its real parents were, is not now to be determined. Our drawing was taken from plants sent to us by Sir R. C. Hoare, from his interesting and extensive collection of Geraniaceæ, at Stourhead; the scent of the leaves is very pleasant, very much resembling that of Lemon; it makes a snug compact little bush, and our plants have been covered with bloom ever since last April, which makes it a very desirable plant; it is also as hardy as any of the genus, thriving well in any rich light soil; or a mixture of loam and peat suits it very well. Cuttings root freely if taken off in the young wood, and planted in pots, and placed in a shady situation.



Root large and woody, branching
 variously, the bark smooth, the
 inner part white, and the wood
 a light brown. The leaves are
 pinnate, with the pinnae
 linear, and the petioles
 short. The flowers are small,
 and the fruit is a small,
 round, black berry. The plant
 is common in the mountains
 of the Alps, and is used
 as a medicine. The root is
 said to be a powerful
 diuretic, and the berries
 are said to be a powerful
 cathartic. The plant is
 also said to be a powerful
 antiseptic, and is used
 in the treatment of
 various diseases.



G. D. Smith del

Pubby J Ridgway 170 Piccadilly Oct. 1. 1825

J. Walpole sc

PELARGONIUM rutaceum.*Rue-scented Stork's-bill.*

P. rutaceum, caule carnosio nodoso subsimplici, foliis pinnatis glaucescentibus glabris carnosius: foliolis pinnatifidis: segmentis oblongis acutis inciso-dentatis, petiolis pedunculisque sparse pilosis, umbellis multifloris, floribus pentandris, tubo nectarifero subsessili calyce reflexo 3-4-plo longiore.

Pelargonium rutaceum. *Swt. hort. brit. p. 84. n. 389.*

Root large, branching out into numerous tubers, of various shapes and sizes. *Stem* fruticose, succulent, knotted unequally in irregular large swellings at the joints, of a brownish glaucous colour, the upper part thickly clothed with long spreading white hairs, and producing a few long slenderish flowering branches. *Leaves* like a large fern or umbelliferous plant, the upper ones like Rue, to which the scent also bears a strong resemblance, succulent, glaucous: lower ones very large and spreading, decomponently divided; others pinnate, the leaflets pinnatifid or bipinnatifid; segments oblong, or sometimes lanceolate, acute, incised or sharply toothed, or sometimes entire. *Petioles* nearly cylindrical, swollen at the base, thinly clothed with long spreading hairs, very slender when compared with the large leaf, which it can scarcely support without assistance. *Stipules* variable, some broadly cordate, and others lanceolate, acute, slightly hairy and fringed. *Peduncles* very long, slightly angular, glaucous, also hairy. *Involucre* of numerous lanceolate, acute, fringed bractes, their points terminated by a little tuft of bristly hairs. *Pedicles* very short, not half the length of the bractes. *Calyx* 5-cleft; segments ovate, bluntish, pubescent, all tipped with a tuft of long white hairs. *Nectariferous tube* pubescent, a little flattened on each side,

more than 3 times longer than the calyx. *Petals* 5, roundly obovate, the 2 upper ones largest; the upper part of a dark chocolate colour, edged with yellow, the lower part also pale yellow: lower ones narrower, dark chocolate colour, edged with yellow. *Filaments* 10, united at the base, 5 bearing perfect anthers, the back one a large spatulate one, as in the Section MONOSPATALLA, two back sterile ones a little reflexed; those, also, make an attempt at anthers, but it is very imperfect; the other 3 incurved, as in its parent. *Style* green, slightly hairy. *Stigmas* 5, yellowish, reflexed.

This curious plant is a hybrid production, and was raised in 1823 at the Nursery of Mr. Colvill, from a seed of *P. multiradiatum* that had been fertilized by the pollen of *P. gibbosum*; it is intermediate between both parents in every part of the plant; even the character of the flowers are intermediate between the two sections, having the 5 fertile anthers of *P. multiradiatum*, with the spatulate filament of *P. gibbosum*, and an attempt at the other two anthers: like its two parents, its flowers are without scent during the day, and in the evening are very strongly scented, and most pleasant at a little distance; the scent of the flowers, as well as the leaves, partake a good deal of the Rue, which is rather too powerful to be near; in the natural arrangement it must be placed with *P. multiradiatum*, in Decandolle's Section POLYACTIUM, to stand next to our Section MONOSPATALLA.

The habit of the present plant is altogether different from any other, which makes it the more desirable; two plants were raised from seeds at the same time, and we cannot perceive the slightest difference in them; they also came in flower together for the first time, in July last; being of a succulent nature, it does not require much water, except when in flower or growing freely; like the other succulent species, it succeeds well in an equal mixture of turfy loam, peat, and sand; and cuttings root freely on a shelf in the Greenhouse.



E. D. Smith, del.

Pub by J. Ridgway 169 Piccadilly Oct. 1. 1825.

J. Walter.

PELARGONIUM variifolium.*Various-leaved Stork's-bill.*

P. variifolium, caule subflexuoso erecto ramoso: ramis gracilibus ad geniculis nodosis, foliis inferioribus cordatis tripartitis inciso-dentatis; superioribus cuneato-ovatis, stipulis lanceolatis acutis, calycibus reflexis, petalis superioribus obovato-rotundatis: inferioribus cuneatis, tubo nectarifero calyce sesquilingiore.

Pelargonium variifolium. *Swt. hort. brit. p. 84. n. 393.*

Stem shrubby, erect, branching; *branches* slender, swollen at the joints, and clothed with short unequal hairs. *Leaves* incised or sharply toothed with large teeth, pubescent on both sides: *lower ones* cordate, deeply 3-parted; lower segments 2-lobed, sharply and unequally toothed; terminal segment generally 5-lobed and sharply toothed: *upper leaves* ovate or cuneate, sharply cut or deeply toothed. *Petioles* flattened a little on the upper side, and rounded on the lower, thickly clothed with spreading unequal hairs. *Stipules* lanceolate, taper-pointed, clothed with short hairs. *Peduncles* cylindrical, axillary, or opposite to a leaf, clothed with spreading unequal hairs. *Umbels* several flowered. *Involucre* of 6 lanceolate taper-pointed bractes. *Pedicles* unequal in length, generally longer than the bractes. *Calyx* 5-cleft, segments lanceolate, acute, upper one largest, erect, the others reflexed. *Nectariferous tube* about half as long again as the calyx, flattened and furrowed on each side, thinly clothed with hairs. *Petals* 5, the two uppermost roundly obovate, attenuated to the base, of a bright scarlet, with an inter-

rupted velvety patch in the centre, and numerous dark lines that branch nearly all over the petals: lower petals unguiculate, wedge-shaped, of a bright scarlet, with 2 dark lines from the base. *Filaments* 10, joined in a tube at the base, 7 bearing anthers, which are generally imperfect. *Style* pale coloured, slightly hairy at the base, and smooth upwards. *Stigmas* 5, purple, reflexed.

This very pretty and bright flowering plant, which, we are sorry to say, cannot be done justice to by the artist, is a hybrid production, and we believe is the produce of *P. fulgidum*; but what its other parent was, is not so easy to be determined; we should suppose, from its knotted joints, that it is somewhat related to *P. sanguineum*, or to some hybrid species that has been produced by it.

Like the plants to which the present is nearest akin, it succeeds well in an equal mixture of turfy loam, peat, and sand, and continues to bloom successfully all the summer, and until late in autumn; care must be taken, not to sodden it with too much wet, as it is rather impatient of moisture. Cuttings strike root readily, planted in pots, and placed on a shelf in the Greenhouse.

Our drawing was taken from a fine healthy plant, covered with its splendid flowers, in the collection of Robert Henry Jenkinson, Esq. where it was raised from seed.



PELARGONIUM luridum.*Lurid Stork's-bill.*

P. luridum, radice tuberoso maximo rugoso-corticata squamoso, foliis ovatis obtuse dentatis incisive glabris subpubescentibus, scapo simplici, umbellis multifloris patentissimis, floribus longissime pedicellatis, petalis subæqualibus obovatis demum reflexis, tubo nectarifero calyce quintuplo longiore.

Pelargonium luridum. *Colv. catal. ed. 2. p. 22. col. 1.*
Swt. hort. brit. p. 78. n. 45.

Geranium luridum. *Andrews's geran. c. ic.*

Pelargonium huræfolium *Colv. catal. ed. 1. p. 21. col. 2.*

Root tuberous, very large, oval or oblong, and clothed with a thick hard woody bark, that is cracked irregularly, and scales off like the bark of a tree. **Stems** very short, or none. **Leaves** broadly ovate, rounded at the base, or sometimes cuneate, bluntish, incised, and toothed with large bluntly rounded teeth, of a glossy green on the upper side, the underside and margins slightly hairy. **Petioles** unequally hairy. **Stipules** subpersistent, ovately lanceolate, acute, turning dark brown by age. **Scapes** simple, several from one root, sometimes with a leaf or two near the base, at other times without; about the size of a Raven's quill, clothed with very short unequal, almost gland-like hairs, or short pubescence. **Involucre** of numerous small taper-pointed bractes. **Umbels** from 15 to 24-flowered, divaricately spreading. **Pedicles** very long, thickly clothed with short, but unequal hairs, a little swollen and transparent where joined to the nectariferous tube.

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Calyx 5-cleft, segments pubescent, all reflexed; upper and lower one broadest, oblong or ovate, obtuse, the other 3, lanceolate and more acute. *Petals* 5, nearly equal, obovate, with long unguis, of a straw colour, tinged with brownish copper, spreading when first open, afterwards all reflexed. *Filaments* 10, united at the base, 7 bearing anthers, one of them a large spatula shaped one, which produces an anther about half the size of the others. *Style* short, smooth, and straw coloured. *Stigmas* 5, spreading.

Several roots of this very distinct and curious species, were received from the Cape, by Mr. Colvill, in the year 1820, and was named by us *P. huræfolium* in Mr. Colvill's Catalogue, published in 1821, as we had not then seen their flowers; the following year they produced flowers, but not in perfection, though sufficiently so, for us to determine it to be the *Geranium luridum* of Mr. Andrews, drawn from a plant at Mr. Lee's, which we recollect having been pointed out to us as a great rarity, as far back as 1811; when we were also informed that there was no means of propagating it; the method now generally adopted of fertilizing the stigmas with the pollen, being at that time scarcely ever attended to: and they seldom produce any offsets to their tubers, so that there is scarcely any means of propagating them, except by seeds.

Mr. Colvill's plants have flowered in great profusion this autumn, when our drawing was made. Like the other plants of this section, it succeeds well in an equal portion of light turfy loam, peat, and sand, requiring no water when in a dormant state, and not a great deal at any time; as it makes but few fibrous roots, the pots must also be well drained with small potsherds, that the water may pass readily off, so that the mould do not get sodden: seeds of it ripen readily, if pains be taken to fertilize the stigmas with the pollen when in bloom.

PRUNELLA SP.



Prunella sp. - The fruit is a small, round, black berry. The leaves are green, serrated, and have a distinct venation. The flowers are large, tubular, and have a deep red or purple color.



PELARGONIUM rhodanthum.*Rose-coloured Stork's-bill.*

P. rhodanthum, ramis pilosis, foliis subcordatis acutis quinquelobis undulato-plicatis argute dentatis ciliatis: supra glabris nitidis: subtus nervisque pilosis, stipulis oblongis acuminatis subdentatis, umbellis laxis plurifloris, petalis lato-obovatis imbricatis, tubo nectarifero calyce reflexo subæquali aut parum longiore.

Pelargonium rhodanthum. *Swt. hort. brit. p. 84. n. 396.*

Stem shrubby, flexuose, much branched, thickly clothed with spreading unequal white hairs. *Leaves* slightly cordate, acute, 5-lobed, much undulate and plaited, more or less cucullate, sharply toothed with very unequal rigid teeth, and fringed with short hairs, of a smooth glossy green on the upper side, the under side and nerves thinly clothed with spreading white hairs: *upper leaves* inclining to wedge-shaped, 3 to 5-lobed, and very sharply toothed. *Petioles* stout, unequal in length, flattened on the upper side, and convex on the lower, thinly clothed with spreading hairs. *Stipules* oblong, or sometimes lanceolate, taper-pointed, often toothed and ciliate. *Peduncles* long, cylindrical, thinly clothed with spreading hairs. *Umbels* several-flowered, loosely spreading. *Involucre* of 6 or 8 lanceolate, acute, fringed bractes. *Pedicles* unequal in length, sometimes about the length of, at other times twice as long as the bractes. *Calyx* 5-cleft, segments lanceolate, reflexed or revolute, very hairy and ciliate, the upper one broadest, more erect and slightly keeled. *Nectariferous tube* broadly flattened, and gibbous at the base, about the length of, or a little longer than the calyx. *Petals* 5, very broad and much imbricate, roundly obovate; the two upper ones

broadest, oblique at the base, of a bright rose colour, a little stained in the centre, and several purple lines from the base, branching in various directions: lower petals rather lighter, about half the breadth of the upper ones. *Filaments* 10, united at the base, 7 bearing anthers. *Style* flesh-coloured, slightly hairy at the base, and smooth upwards. *Stigmas* 5, purple, reflexed, or revolute.

This fine plant is a hybrid production, and has been raised from seed at the Nursery of Mr. More, in the King's Road, where our drawing was made last summer; it is very different from any other of the hybrid sorts to which it is nearest related, and is readily distinguished by its broad petals; we believe, from the shape of those, and the habit of the plant altogether, that one of its parents is *P. macranthon*, and the other is one of the red flowering sorts, but which, it is not easy to guess: it makes a fine appearance when in bloom, as it is a strong growing plant, and its flowers are very large, and produced in great abundance; the colour is also different from most others, being of a lively rose; it is also amongst the hardiest of the red flowering sorts, and grows freely in any light rich vegetable soil, or a mixture of light turfy loam, peat, and sand, will suit it very well. Cuttings will also root freely, if planted in pots, in the same sort of soil, and placed on a shelf in the Greenhouse.



p. 348. *Hort.*

p. 118. *Willden.*

p. 23.

p. 92. f. 9.



E. D. Smith del.

Pubby & Ridgway 109 Piccadilly Nov 1. 1825.

J. Wallis sc.

ERODIUM glaucophyllum.*Glaucous-leaved Heron's-bill.*

E. glaucophyllum, caule erecto ramoso: ramis nodoso-articulatis glabris, foliis oblongo-ovatis sublobatis crenatis subcarnosis glaucescentibus glabris subtus nervisque subpubescentibus, pedunculis plurifloris, petalis ellipticis distinctis patentibus, aristis à medio ad apicem longè plumosis.

Erodium glaucophyllum. *DC. prodr.* 1. p. 648. *Hort. Kew. ed.* 1. v. 2. p. 416. *ed.* 2. v. 4. p. 158. *Willden. sp. pl.* 3. p. 636. *Pers. syn.* 2. p. 225.

Geranium glaucophyllum. *Cav. diss.* 4. p. 221. *t.* 92. *f.* 2. *Dill. elth.* 150. *t.* 124. *f.* 150.

Geranium crassifolium. *Forskahl descr.* 23.

Perennial? herbaceous. *Stem* erect, much branched: *branches* spreading, smooth, knotted at the joints, lengthening out and becoming slender at the points. *Leaves* oblongly ovate, bluntish, slightly lobed, unequally crenate or notched, smooth and glaucous, or slightly pubescent underneath and on the nerves. *Petioles* slender, thickened at the base, slightly flattened on the upper side, scarcely pubescent. *Stipules* elliptic or lanceolate, acute, soon withering and turning brown. *Peduncles* slender, cylindrical, scarcely pubescent, from 2 to several flowered. *Involucre* of several membranaceous scariose bractes. *Pedicles* slender, pubescent, erect when in flower, but reflexed when in seed, the calyx and seed ascending. *Calyx* of 5 sepals, which are oblongly lanceolate, mucronate, strongly nerved and furrowed, with scariose membranaceous mar-

gins. *Petals* 5, elliptic, distinctly spreading, longer than the calyx, strongly fringed at the base, of a bluish lilac. *Filaments* 10, united at the base, 5 bearing anthers; fertile ones winged at the base with subulate points. *Stigmas* 5, short and flat, sessile, spreading, dark purple. *Arista's* very long, spiral at the base, from the middle to the point feathered, with long white feathered hairs.

This curious and rare plant is generally considered as an annual, but the one from which our drawing was taken has already survived two years, and appears likely to prove perennial, as it is now making strong young shoots, below the flower stems, that are all dying away, so that if the plant was only biennial, we suspect it would have went off altogether at the same time, instead of making young healthy shoots.

Our plant was raised from a seed given us by Mr. Hunneman, who received it from Germany; whether or not it will prove hardy enough to survive our winters in the open air, remains to be ascertained, as the last one can scarcely be called a winter at all, but we intend to try it, as our plant has produced abundance of seeds.



E. D. Smith del.

Printed by J. Ridgway, 109 Piccadilly, Nov. 1. 1825

J. Wallis sc.

PELARGONIUM volatiflorum.*Flying-flowered Stork's-bill.*

P. volatiflorum, ramis flexuosis gracilibus, foliis 3-partitis subcanescenti-pubescentibus : segmentis divaricatis dentatis ; lateralibus bilobis terminalibus 3-5-lobis inciso-dentatis, stipulis cordato-ovatis acutis, umbellis plurifloris paniculatis, petalis patentissimis, tubo nectarifero calyce subæquali.

Pelargonium volatiflorum. *Swt. hort. brit. p. 84. n. 392.*

Stem shrubby, when large, clothed with a rough cracked bark, much branched : *branches* rather slender, flexuose, more or less spreading, thickly clothed with short spreading unequal white hairs. *Leaves* deeply 3-parted, thickly clothed on both sides with short white hairs, which gives them a hoary appearance : segments divaricately spreading, toothed with very unequal teeth, and tipped with bristle-like hairs : side ones 2-lobed : terminal one 3 to 5-lobed ; unequally toothed or cut, teeth more or less acute. *Petioles* a little flattened on the upper side, and convex on the lower, thickly clothed with short spreading unequal hairs. *Stipules* cordately ovate, taper-pointed, very hairy and fringed. *Peduncles* 3 to 7-flowered, in a sort of panicle, thickly clothed with short hairs and a few longer ones intermixed. *Involucre* of 6 lanceolate, acute, fringed bractes. *Pedicles* shorter than the bractes. *Flowers* leaning forwards. *Calyx* 5-cleft, hairy, segments reflexed, acute, the upper one largest, oblong, keeled ; the others lanceolate or linear, the margins scariose or membranaceous. *Petals* 5, widely spreading, having an appearance of flying ; 2 upper ones narrowly spathulate, reflexed from

about the middle, of an orangy scarlet, marked with numerous dark lines and spots, which branch nearly all over the petals : lower petals about half the width, of the same colour, marked with two dark lines near the base, which are also slightly branched. *Filaments* 10, united into an inflated tube, 7 bearing anthers. *Style* pale, very hairy. *Stigmas* 5, purple, revolute, or reflexed.

This very singular plant is a hybrid production, and was raised in the superb collection of R. H. Jenkinson, Esq. from a seed of *P. fulgidum*, which, from the appearance of the present plant, we should suspect had been fertilized by the pollen of *P. verbenæfolium*, as it seems to be exactly intermediate between the two, although its flowers are not so large as many others, yet their number, and the brilliancy of their colour, makes up for that deficiency ; the flowers are produced in panicles, so that the upper part of the plant is oftentimes covered with its singular blossoms, which may not unaptly be compared to flying insects, to which, in our opinion, when the petals are spread out, they bear a great resemblance, and from which our specific name is derived.

Like its nearest allies, the present plant succeeds well in an equal mixture of turfy loam, peat, and sand, and cuttings root readily, planted in pots in the same sort of soil, and placed on a shelf in the Greenhouse.



PELARGONIUM Moreanum.

More's Victory Stork's-bill.

P. Moreanum, caule fruticoso ramosissimo, ramis diffusopatentibus villosis, foliis cordatis pinnatifido-lobatis utrinque pilosis plicato-crispis: segmentis oblongis sublobatis rotundato dentatis obtusiusculis, stipulis brevicaudatis acutis subdentatis, pedunculis plurifloris, petalis cuneatis, tubo nectarifero calyce subæquali.

Pelargonium Moreanum. *Swt. hort. brit. p. 84. n. 388.*

Stem shrubby, flexuose, very much branched, clothed with a brown rough bark: *branches* more or less bent, very much spreading in all directions, thickly clothed with leaves, and with unequal spreading villous white hairs. *Leaves* cordate, oblong, pinnatifidly divided or deeply lobed, hairy on both sides, strongly nerved underneath and furrowed on the upper side, the nerves much branched: segments plaited, scarcely acute, very much curled, sometimes lobed, and unequally toothed with numerous small rounded teeth. *Petioles* flattened and furrowed on the upper side, and convex on the lower, unequally villous. *Stipules* short, cordate, acute, entire or sometimes sharply toothed, villous and fringed. *Umbels* 5 to 7-flowered. *Peduncles* thickly clothed with unequal spreading villous hairs, as are the bractes, calyx, and nectariferous tube. *Involucre* of 6 broadly lanceolate, acute, keeled, and ciliated bractes. *Pedicles* short, villous. *Calyx* 5-cleft, upper segment erect, ovate, concave, obtuse; the others narrower, oblong or lanceolate, more acute, the margins sometimes scariose or membranaceous, spreading or reflexed. *Petals* 5, all cuneate or wedge-shaped, the two

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upper ones nearly double the breadth of the lower ones, of a bright orangy scarlet, with a dark velvety spot in the centre, below which are some shortly branched dark lines; lower petals regularly spreading, 2-nerved from the base. *Filaments* 10, connected at the base, 7 bearing anthers, which in our specimens were all imperfect. *Style* hispidly hairy. *Stigmas* 5, purple, reflexed.

This very fine plant is of hybrid origin, and was raised from seed by Mr. More, in 1823; the seed was produced by *P. ignescens* $\times$ *sterile*, that had been fertilized by *P. dianthiflorum*; the habit and foliage of the plant is altogether that of the latter parent, but the flowers partake in the colour of the former, but they far exceed it in brilliancy: its flowers are also produced in great abundance, frequently 7 on an umbel, and it continues to bloom in succession all the Summer, and till late in Autumn: it also makes a compact bushy plant, and may be grown with advantage in a small pot, where room is of consequence. It requires precisely the same sort of treatment as those to which it is nearest related, succeeding well in a rich light sandy soil, or a mixture of turfy loam, peat, and sand, will suit it very well, being careful not to overwater it in Winter. Cuttings root as freely as any others, if planted in pots, and placed on a shelf in the greenhouse. Our drawing was taken at the Nursery of Mr. More, in August last, and we received a plant of it in full bloom in October.





OTIDIA alternans.

Parsley-leaved Otidia.

O. alternans, caule fruticoso subcarnoso; ramis pilosis, foliis pinnatisectis; segmentis petiolulatis subalternis cuneiformibus apice inciso-dentatis, umbellis paucifloris. *DC. prodr.* 1. p. 655.

Otidia alternans. *Swt. hort. brit.* p. 75. n. 6. *Colv. catal.* ed. 2. p. 22.

Pelargonium alternans. *Wendl. h. herren.* 1. p. 14. t. 9. *Willden. sp. pl.* 3. p. 687. *Pers. syn.* 2. p. 233. *Hort. Kew. ed.* 2. v. 4. p. 182.

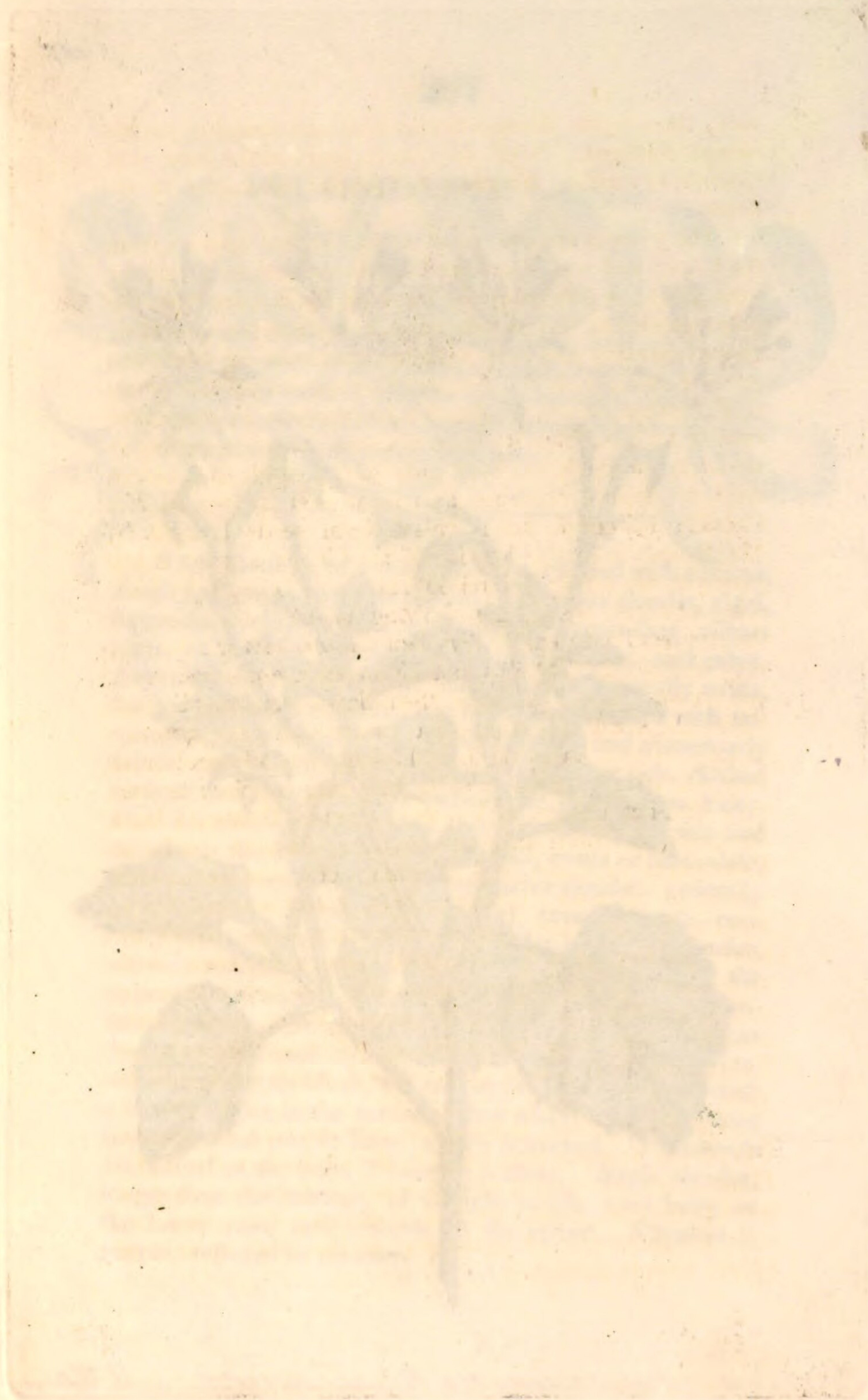
Pelargonium alternatim-pinnatum. *Wendl. obs.* p. 53.

Stem succulent, very much branched: *branches* short, erect, succulent, rough and knotted, compact, clothed with a brown glossy bark; the young shoots thickly clothed with short densely villous hairs. *Leaves* pinnate, thickly clothed with long white hairs: *leaflets* petiolate, generally alternate, cuneate, 3-lobed or 3-parted, the points curled or undulate, more or less cut or toothed, the teeth bluntish. *Petioles* slender, slightly flattened on the upper side and rounded on the lower, thickly clothed with long spreading white hairs, of very unequal lengths. *Stipules* short, cordately ovate, acute, rather succulent, but soon becoming brown and scariose. *Peduncles* 2 to 4-flowered, terminal, thickly clothed with unequal, spreading hairs. *Involucre* of 6 narrow lanceolate, very hairy bractes, points bearded. *Pedicles* very short. *Calyx* 5-cleft, the segments lanceolate, concave, acute, very hairy and fringed, longer than the nectariferous tube, spreading or slightly reflexed. *Nectariferous tube* short, flattened on each side, gibbous at the base. *Petals* 5, nearly equal in size, narrowly spatulate, white: the 2 upper ones narrow at the base, reflexed from about the middle, with 2 red lines near the centre, eared a little above the base. *Stamens* 10, united at the

base, the 5 fertile *filaments* very long and straight; *pollen* orange-coloured. *Style* very short, hairy at the base, and smooth upwards. *Stigmas* 5, purple, spreading or reflexed.

The present curious plant is an original species from the Cape, and was introduced to our collections about the year 1791; it differs in the form of its flowers from the other species of this genus, but is nevertheless a true congener, agreeing precisely with the character by which the genus is distinguished. Another fine species of this genus is *P. crithmifolium* of Smith's Icones, the *P. paniculatum* of Jacquin; this we have not seen flower so perfect as we wish, or we should have published a figure of it before this: we believe there are also some new species in Mr. Colvill's collection, lately raised from seeds brought by Mr. Synnet from the interior of the Cape; a great many plants of this family are raised from seeds brought by him, some of which are already showing bloom; and plants of the rare and little known *Grielum laciniatum* are thriving very well at Mr. Colvill's, both from seeds and dried roots; and we are in hopes of seeing them flower early next Spring. From the same collection were procured a great quantity of Cape bulbs; many of those have already bloomed, and they are chiefly either new or very rare species; several very distinct species of Ventenat's genus HOMERIA have flowered, and three quite new and very different species of FERRARIA; of those and of many new and interesting species of MORÆA, BABIANA, IXIA, LAPEYROUSIA, GLADIOLUS, &c. we have had fine drawings made, which we intend publishing in our BRITISH FLOWER GARDEN, with an account of their management, and the best manner of cultivating them in the open ground, where, with a little attention, they may be grown as freely as Hyacinths or Tulips, and will flower stronger and much finer than in pots.

The above plant, from which our drawing was made, was sent to us some time back, by the kindness of Sir R. C. Hoare; but we waited an opportunity of its flowering in good perfection, before we had it drawn; it requires exactly the same sort of treatment, as the other species of Otidia already published.





E. D. Smith del.

Publ by J. Ridgway 169 Piccadilly Dec 1. 1825

J. Watts sc

PELARGONIUM biflorum.*Two-flowered Stork's-bill.*

P. biflorum, caule fruticoso ramosissimo, foliis cordatis rotundato-ovatis acute dentatis subtus multinerviis utrinque pubescentibus, stipulis ovato-lanceolatis acutis ciliatis, pedunculis bifloris, petalis omnibus obovatis, tubo nectarifero calyce parum brevior.

Stem shrubby, of a woody texture, clothed with a brown rough bark, very much branched: *branches* slender, rigid, flexuose, thickly clothed with unequal spreading villous hairs, as are the petioles, peduncles, bractes, and calyx. *Leaves* nearly as broad as long, cordate, roundly ovate, flat or sometimes concave, not lobed, but toothed with numerous unequal small sharp teeth, strongly and numerously nerved underneath, and furrowed on the upper side, clothed on both sides with a short pubescence, the nerves hairy. *Petioles* slender, flattened a little on the upper side and convex on the lower. *Stipules* small, ovate or lanceolate, acute, hairy and fringed. *Peduncles* slender, generally two-flowered. *Involucre* of 6 short, broadly ovate, concave, taper-pointed bractes. *Pedicels* long and slender, villosely hairy. *Calyx* 5-cleft, segments all reflexed, the upper one broadest, ovately lanceolate; the others lanceolate, all acute. *Nectariferous tube* a little shorter than the calyx, flattened on both sides. *Petals* 5, all obovate, white tinged with blush, the two upper ones broadest, with a faint red spot in the centre, below which are a few short bright red and purple lines, a little branched. *Filaments* 10, united at the base, 7 bearing anthers. *Style* slender, longer than the stamens, of a bright purple, very hairy on the lower part, and smooth on the upper. *Stigmas* 5, purple, reflexed or revolute.

This very pretty and abundant flowering plant, is a hybrid production, and was raised from seed by Sir R. C. Hoare, who was so kind as to send us cuttings of it from his fine collection, some time since, but without a name or number, only marked H. S. or Hoare's Seedling; this we have supplied with *P. biflorum*, as its peduncles are generally 2-flowered: it is nearest in habit to *P. betulinum*, which is probably one of its parents; but it is readily distinguished by its cordate pubescent leaves and villous stems, also by the shape of its flowers; and it is very different from any other with which we are acquainted. It is a very free grower, and a very hardy sort, and makes a compact bushy plant, continuing to flower all the Summer and till late in Autumn; it thrives well in any light vegetable soil, or a mixture of turfy loam and peat will suit it very well; young cuttings, planted in pots in the same kind of soil, will soon strike root, if placed on a shelf in the greenhouse. Our drawing was taken in October last, at the same time as *Otidia alternans*.





E. L. Smith. del.

Publ. by J. Ridgway 169 Piccadilly Dec 1. 1825

J. Watts. sculp.

PELARGONIUM mundulum.*Spruce Stork's Bill.*

P. mundulum, subcaulescens, scapo gracili longe ramoso, umbellis sub-8-floris, foliis pinnatifidis pinnatisque canescentibus: foliolis segmentisque inferioribus 2-3-partitis 2-3-lobisve: superioribus simplicibus lanceolatis ovatisque integerrimis acutis omnibus sericeo-canescens, tubo nectarifero calyce duplo longiore.

Pelargonium mundulum. *Swt. hort. brit. p. 84. n. 394.*

Root tuberous, branching. **Stem** short, producing several short stout branches. **Leaves** pinnate, or pinnatifid, thickly clothed with a short silky canescence: **leaflets** or **segments** lanceolate or ovate and acute, the lower ones 2 or 3-parted, or 2 to 3-lobed: the upper ones entire, all clothed with a silky canescence. **Petioles** slender, nearly cylindrical, or slightly flattened on the upper side, densely clothed with short hairs and a few longer ones intermixed. **Stipules** lanceolate, acute, hairy and fringed with very short hairs, joined a good way up to the petioles. **Scapes** several, long and slender, and producing several umbels of flowers, leafy at the base of the peduncles, thickly clothed with white spreading hairs, very unequal in length. **Peduncles** cylindrical, long and slender, generally producing an umbel of 8 flowers, also clothed with spreading unequal hairs. **Involucre** of several lanceolate, acute, hairy and fringed bractes, some double the size of the others. **Pedicles** very short, or altogether wanting. **Calyx** 5-cleft, segments lanceolate, acute; the upper one largest, erect, the others spreading or slightly reflexed, all densely clothed with soft woolly hairs. **Nectariferous tube** about double

the length of the calyx, slightly flattened on each side, and thickly clothed with spreading hairs. *Petals* 5, the 2 upper ones slightly retuse, narrowly cuneate, of an orangy scarlet, white at the base, and marked from there to the middle with a few short branched dark purple lines: *lower petals* about half the width of the upper ones, of rather a lighter colour, and white from below the middle. *Filaments* 10, united at the base, 7 bearing anthers. *Style* short, purple, thickly clothed with short hairs. *Stigmas* 5, purple, reflexed.

A very pretty hybrid plant, raised in 1823 at the Nursery of Mr. Colvill, from the seed of a mule from *Dimacria pinnata*, that had been fertilized by the pollen of *P. ardens*; the leaves and the colour of the flowers are very similar to its former parent, but its habit, loose growth, and form of the flowers, is more like the latter: it is a very free growing sort, and an abundant bloomer, beginning to flower the latter part of February or the beginning of March, and our plant was very fine in flower the beginning of November: like its nearest relatives, it succeeds best in a light sandy soil, and requires very little water after it has done flowering: an equal mixture of light turfy loam, peat, and sand, is a very proper soil for it; and the pots must be well drained with potsherds broken small, that the moisture may pass readily off: the best method of increasing it is by the little tubers of its roots; the most proper time for taking those off, is when the plants are in a dormant state, as they can then be kept quite dry till the wound is dried up; they would otherwise be liable to rot: the roots must be planted with their tops above the surface of the mould, to prevent their rotting; and as soon as the cut is dried up, they may be regularly watered, and they will soon make nice young plants, and will flower the first Summer.

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GERANIACEAE

NATURAL ORDER GERANIACEAE

Geranium, Dianthus, Pelargonium, &c.

Geranium, Dianthus, Pelargonium, &c.

Geranium, Dianthus, Pelargonium, &c.

Geranium, Dianthus, Pelargonium, &c.

Geranium, Dianthus, Pelargonium, &c.

Geranium, Dianthus, Pelargonium, &c.



S. D. Smith. del.

R. by J. Ridgway 109. Piccadilly. Decr. 1. 1826.

J. Watts. sc.

PELARGONIUM schizophyllum.*Deeply cut-leaved Stork's-bill.*

P. schizophyllum, caule fruticoso ramoso; ramis nodosis flexuosis glaucescentibus, foliis tripartitis pinnatifido-laciniatis acutis glaucescentibus acute inciso-serratis, stipulis ovato-lanceolatis acutis, umbellis multifloris, tubo nectarifero longe pedicellato calyce sesquolongiore.

Pelargonium schizophyllum. *Swt. hort. brit. p. 82. n. 295.*

Stem shrubby, branching: *branches* spreading, flexuose, swollen at the joints, glaucous, slightly pubescent. *Leaves* ternate, or deeply 3-parted, acute, more or less glaucous, sharply cut and toothed, clothed on both sides with very short hairs: lower leaflets or segments deeply 2-parted, divaricate; terminal one pinnatifid or deeply laciniated, the sinuses acute. *Petioles* slender, nearly cylindrical, or slightly flattened on the upper side, pubescent. *Stipules* ovate or lanceolate, taper-pointed. *Peduncles* cylindrical, glaucous, slightly pubescent, in a sort of panicle, many-flowered. *Involucre* of from 6 to 8 linearly lanceolate acute bractes. *Pedicels* long and slender, transparent at the base and apex, longer than the nectariferous tube. *Calyx* 5-cleft, segments erect, lanceolate, acute, keeled and ciliate. *Nectariferous tube* about half as long again as the calyx, flattened on both sides, pubescent. *Petals* 5, of a red salmon colour, the 2 upper ones erect, wedge-shaped, and marked from the base with purple slightly branched lines: lower ones spreading, ligulate, also faintly marked with red lines from the base. *Filaments* 10, united at the base, 5 only bearing anthers in the specimens that we have examined, and those were very

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imperfect. *Style* green, very hairy. *Stigmas* 5, purple, reflexed.

Our drawing was taken from a fine plant in the superb collection of R. H. Jenkinson, Esq. where it was first raised from seed: it is of hybrid origin, and was raised in 1822 from the seed of *P. fulgidum* that had been fertilized by the pollen of *P. grandiflorum*: its nearest relative is *P. Barnardianum*, which was raised from the seed of *P. grandiflorum* mixed with *P. fulgidum*. The present plant is of much readier growth; its leaves are much more divided, and it bears a far greater number of flowers in the umbels, which are produced in a sort of panicle, and continue to bloom till late in Autumn; it is therefore a very desirable plant, particularly as it is so different from all the others of this numerous tribe. It succeeds well in an equal mixture of light turfy loam, peat, and sand, or any other light sandy soil; it also strikes root readily from cuttings planted in pots, and placed on a shelf in the greenhouse; it may also be increased by pieces of the roots, planted with their tops above the surface, that they may not rot; those will soon make nice young plants, and will flower the same season, if planted early in Spring; as soon as they begin to make shoots, they must be planted separately in small pots, leaving only one shoot to each root; for if more are left, they will weaken each other, and will not succeed so well.



E. D. Smith del.

Printed by J. Ridgway 169 Piccadilly Jan 1. 1826.

J. Watts sc.

DIMACRIA depressa.*Depressed umbelled Dimacria.*

D. depressa, acaulis, foliis oblongo-lanceolatis integerrimis acutis glabris basi involutis attenuatis margine breviter ciliatis, stipulis barbatis, umbella composita depressa multiflora, pedicellis demum reflexis, floribus tetrandris, filamentis 6 sterilibus erectis, petalis longis linearibus, tubo nectarifero villosa calyce duplo longiore.

Hoarea depressa. *Swt. hort. brit. p. 76. n. 24.*

Pelargonium depressum. *Jacq. ic. rar. 3. t. 520. Pers. syn. 2. p. 226. DC. prodr. 1. p. 649.*

Root tuberous, fusiform. **Stem** none. **Leaves** crowning the root, and spreading round or sometimes erect, oblongly lanceolate, acute, entire, smooth, but dotted with numerous small dots, attenuated towards the base and down the petiole, where it is a little involute, the margins a little fringed with short hairs. **Petioles** long and slender, flattened and furrowed on the upper side, and convex on the lower, slightly pubescent, more so towards the base. **Stipules** linear, acute, attached to the base of the petioles, and densely bearded with long white hairs. **Scapes** several, erect, pubescent, each producing 2 to 4 umbels of flowers; at the base of the peduncles is a whorl of linear, taper-pointed, very hairy bractes. **Peduncles** cylindrical, unequal in length, thickly clothed with short rigid spreading hairs, that are all tipped with a small gland. **Umbels** from 8 to 12-flowered, spreading flat. **Involucre** of numerous linear taper-pointed fringed bractes. **Pedicles** very short, or altogether wanting. **Calyx** 5-cleft, segments lanceolate, acute, all reflexed, very hairy, the hairs all tipped with transparent glands. **Nectariferous tube** unequal in length, generally 2 or 3 times longer than the calyx, thickly clothed

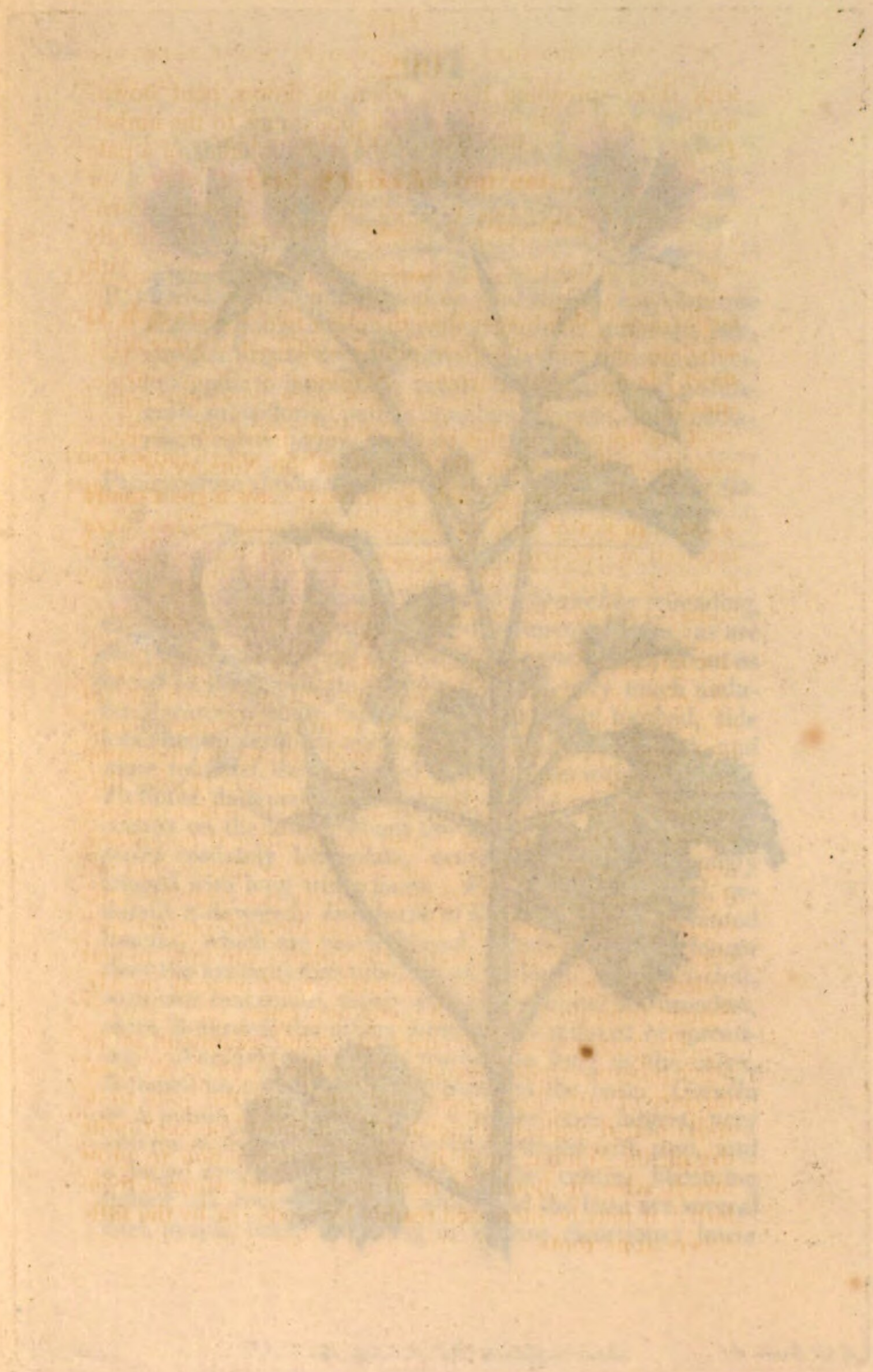
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with short spreading hairs; when in flower, bent downwards, which gives the depressed appearance to the umbel. *Petals* 5, linear, reflexed from about the middle, of a pale sulphur colour, the two upper ones largest, obtuse or sometimes emarginate, marked from the middle downwards with a dark velvety patch. *Filaments* 10, slightly connected at the base, 4 only bearing perfect anthers, with sometimes a sterile one, or attempt at a fifth, two of the fertile ones rather longer than the other two, the sterile ones subulate and erect: *pollen* orange-coloured. *Style* very short, hairy, light purple. *Stigmas* 5, light purple, spreading.

Our drawing of this rare and very handsome species was taken from some fine plants at the Nursery of Mr. Tate, in Sloane Street, Chelsea, where we saw a great many of them in flower without the least variation. They were received in 1824 from the Cape, and had been collected near Algoa Bay for Mr. Tate, with many other curious bulbs: we had also received a fine specimen of the same species, sent us from the collection of A. Arcedeckne, Esq. of Glevering Hall, Suffolk, but the petals had all dropped off before their arrival. Before we had an opportunity of examining the plant, we thought, from its near resemblance to *Hoarea radicata*, that it would belong to the same genus, under which we had arranged it in our Hortus Britannicus above quoted; but we now find it to be a genuine species of *Dimacria*, as is also *longifolia* and *longiflora*, and perhaps *auriculata*? and some other species that are there arranged under that genus, which can only be satisfactorily distinguished by the examination of perfect specimens; we believe several of the species are now in our collections, which have been lately reintroduced by Mr. Synnet from the Cape with many new ones.

The present plant requires the same treatment as the other tuberous rooted species, succeeding well in an equal mixture of turfy loam, peat, and sand, and the pots to be well drained with small potsherds; it should be kept quite dry all the Winter, until it shows an inclination to grow afresh, when it should be fresh potted, and watered regularly; it may be increased readily by seeds, or by the little tubers at its roots.

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PELARGONIUM rhodolentum.

Rose-smelling Stork's-bill.

P. rhodolentum, ramis petiolis pedunculis calycibusque villosis, foliis cordatis profunde trilobis undulatis inæqualiter argute dentatis utrinque leviter pilosis, calycibus cordato-lanceolatis acutis ciliato-barbatis, pedunculis subtrifloris, petalis omnibus obovatis, tubo nectarifero calyce parum brevior.

Pelargonium rhodolentum. *Swt. hort. brit. p. 84. n. 395.*

Stem shrubby, much branched: *branches* spreading, thickly clothed with spreading white unequal hairs, as are the petioles, peduncles, and calyx. *Leaves* small, about as broad as long, cordate, deeply 3-lobed, very much undulate, scarcely acute, unequally but sharply toothed, side lobes acute, terminal one sometimes slightly 3-lobed, and more rounded, thinly clothed on both sides with short hairs. *Petioles* flattened and furrowed on the upper side, and convex on the lower, about the length of the leaf. *Stipules* cordately lanceolate, acute, bearded, or strongly fringed with long white hairs. *Peduncles* cylindrical, generally 3-flowered. *Involucre* of 6 lanceolate, taper-pointed bractes, which are much fringed. *Pedicles* rather longer than the nectariferous tube, stout, villous. *Calyx* 5-cleft, segments lanceolate, taper-pointed, the upper one broadest, erect, 3-nerved, the others more or less reflexed or spreading. *Nectariferous tube* scarcely as long as the calyx, flattened on each side, and gibbous at the base. *Corolla* of 5 petals, all obovate, the 2 upper ones largest, very oblique at the base, of a pale blush tinged with rose, and a large irregular purple patch in the centre, becoming lighter all round, between which and the base are several dark purple lines, branching in various directions: lower

ones white, or tinged with blush. *Filaments* 10, united at the base, 7 bearing anthers. *Style* flesh-coloured, very hairy. *Stigmas* 5, purple, revolute.

This pretty plant is of hybrid origin, and was raised in 1823 at the Nursery of Mr. Colvill, from a seed of *P. dumosum* that had been fertilized by the pollen of *P. obscurum*; in its habit it is distinct from all others, and makes a handsome compact bush; the pleasant rose-like scent of its leaves also makes it a desirable plant for the greenhouse; it is also very hardy and of free growth, succeeding well in any rich light soil, or a mixture of turfy loam, peat, and sand, will suit it very well. Young cuttings will strike root freely, if planted under hand-glasses, or in pots, and then placed in the Greenhouse; hardened cuttings of the small leaved species do not root freely, they will remain a long time in the pots without rooting, although the bottom of the cutting is callosed over; whereas young cuttings will strike readily; this is the case with *P. Hoareanum*, and many other nearly related sorts.



E. D. Smith del

Printed by J. Ridgway 169 Piccadilly Jan. 1826

L. Wallis sc

HOAREA sisymbriifolia.*Water-Rocket-leaved Hoarea.*

H. sisymbriifolia, acaulis, foliis oblongis ternatis pinnatifido-laciniatisque subhirsutis: foliolis segmentisque oblongo-lanceolatis acutis subdentato-incisis, stipulis lanceolatis acutis ciliatis, scapo ramoso pedunculisque villosopilosis, umbellis multifloris, tubo nectarifero calyce duplo longiore.

Hoarea sisymbriifolia. *Swt. hort. brit. p. 76. n. 65.*

Root tuberous, branching into other small tubers. *Stem* none. *Leaves* radical, rather succulent, of a dark glossy green, ternate, pinnatifid or lacinate, slightly hairy: *leaflets* and *segments* oblong, oblongly lanceolate, or sometimes narrowly lanceolate, acute, deeply toothed or incised, or sometimes entire, the margins slightly fringed. *Petioles* slender, flattened on the upper side and convex on the lower, more or less clothed with unequal spreading hairs. *Stipules* lanceolate, acute, hairy and fringed, the points tipped with long bristle like hairs. *Scapes* branching, and producing several umbels of flowers, thickly clothed with unequal spreading villous hairs, as are the peduncles, and producing a leaf or two at the joint. *Peduncles* cylindrical, producing many-flowered umbels. *Involucre* of numerous linear or linearly lanceolate, acute, fringed bractes, that are also tipped with bristly points. *Calyx* 5-cleft, segments oblongly lanceolate, hairy, ciliate and bristle-pointed, the upper one broadest, erect, the others spreading, or slightly reflexed. *Nectariferous tube* sessile, or nearly so, about twice the length of the calyx, flattened on both sides, and clothed with short unequal hairs, that are tipped with a small pellucid gland. *Petals* 5, spreading, of a bright scarlet, clouded with a dark velvety purple

or nearly black, the 2 uppermost broadest, spathulate, with 2 or 3 dark lines near the base: lower ones about half the width, with a slender unguis. *Filaments* 10, united into a tube, 5 bearing anthers, sterile ones curved inwards. *Style* ascending, pale flesh colour, hairy at the base, and smooth upwards. *Stigmas* 5, the points reflexed.

The present very curious and pretty plant is a hybrid production, raised in 1823 at the Nursery of Mr. Colvill, from a seed of *P. sanguineum* that had been fertilized by the pollen of *H. varia*; it has entirely lost the habit of its former parent, and only resembles it in its glossy leaves, and the colour of its flowers; the habit and character is precisely that of *Hoarea*: we do not know any plant that mules more readily than *P. sanguineum*; we have some very singular productions both from it and *P. multiradiatum*; some of them have flowered, but not in such good perfection as we expect them to do next Summer.

Like the other tuberous rooted sorts, the present plant succeeds well in an equal mixture of turfy loam, peat, and sand, requiring but little water, and none when in a dormant state; but as soon as it begins to grow again, it will require to be shifted into another pot, and will need a regular supply; it may be readily increased by the little tubers from its roots.





E. D. Smith del.

Pub. by J. Ridgway 169 Piccadilly Feb. 1826.

J. Watts sc.

PELARGONIUM dilutum.

Diluted Stork's-bill.

P. dilutum, foliis cordatis trilobis undulato-plicatis cartilagineo-dentatis villosopilosis, stipulis ovatis acutis dentatis villosis, pedunculis multifloris, calycibus reflexopatentibus, tubo nectarifero calyce subæquali aut paulo brevior.

Pelargonium dilutum. *Swt. hort. brit. p. 84. n. 386.*

Stem shrubby, erect, branching: *branches* thickly clothed with long spreading unequal villous hairs. *Leaves* cordate, 3-lobed, very much undulate or plaited, the edges more or less reflexed, sharply and rigidly toothed, with nearly equal cartilaginous teeth, clothed on both sides with soft villous hairs, strongly and numerously nerved underneath. *Petioles* broad and stout, flattened on the upper side and convex on the lower, widened at the base, thickly clothed with long spreading unequal villous hairs, as is every other part of the plant except the corolla. *Stipules* ovate, taper-pointed, more or less toothed and ciliate. *Umbels* many-flowered. *Peduncles* cylindrical. *Involucre* of several ovate, taper-pointed, concave, fringed bractes, which are more or less imbricate. *Pedicles* about the length of the bractes, or sometimes a little longer. *Calyx* 5-cleft, segments lanceolate, acute, spreading or slightly reflexed, of a brownish colour. *Nectariferous tube* about the length of, or scarcely as long as the calyx, flattened on each side, and gibbous at the base. *Petals* 5, the 2 upper ones obovate, oblique at the base, of a red purple, more or less stained, and marked with numerous dark lines, which branch and cross each other, below those are 2 white lines: lower

petals oblong, obtuse, spreading, of a lighter colour, much veined with numerous branching light purple veins. *Filaments* 10, united at the base, 7 bearing anthers. *Style* purple, very hairy at the base, and smooth upwards. *Stigmas* 5, purple, revolute.

This very fine flowering plant is of hybrid origin, and was raised from seed at the Nursery of Mr. More, in the King's Road, where our drawing was taken last Autumn; we believe one of its parents to be *P. Barringtonii*, or some nearly related sort, and the other is one of the red flowering hybrids, but which of them, would be difficult to ascertain; it is a strong free growing plant, and an abundant bloomer, and continues flowering in perfection till late in Autumn; it thrives well in any rich light soil, or a mixture of loam, peat, and sand, will suit it very well, being careful not to overwater it in Winter, as all this tribe are impatient of moisture at that season. Cuttings soon strike root, if planted in pots, and placed on a shelf in the greenhouse.

Stems shrubby, erect, branching: branches thickened with long spreading unequal villous hairs. Leaves cordate, 3-lobed, very much undulate or pinnate, the edges more or less reflexed, sharply and rigidly toothed, with nearly equal cartilaginous teeth, clothed on both sides with soft villous hairs, strongly and numerously nerved underneath. Petioles broad and stout, flattened on the upper side and convex on the lower, widened at the base, thickly clothed with long spreading unequal villous hairs, as is every other part of the plant except the corolla. Stipules ovate, taper-pointed, more or less toothed and ciliate. Laminae many-flowered. Peduncles cylindrical. Bracts of several ovate, taper-pointed, concave, fringed bracts, which are more or less imbricate. Pedicels about the length of the bracts, or sometimes a little longer. Calyx 5-lobed, segments lanceolate, acute, spreading or slightly reflexed, of a brownish colour. Ventricle very large about the length of, or scarcely as long as the calyx, flattened on each side, and gibbous at the base. Petals 5, the 2 upper ones ovate, oblique at the base, of a red purple, more or less stained, and marked with numerous dark lines, which branch and cross each other, below those are 3 white lines: lower





E. D. Smith del.

Pick by J. Ridgway 16.9 Pecosdilly Feb 7. 1825

J. W. Webb sc.

PELARGONIUM trifoliatum.*Glaucous trifoliate-leaved Stork's-bill.*

P. trifoliatum, glaberrimum glaucum, caule fruticoso ramosissimo: ramis gracilibus glabris, foliis trifoliolatis: foliolis integerrimis linearibus utrinque acuminatis subtus carinatis scabris; lateralibus brevioribus divaricatis, stipulis lineari-subulatis, pedunculis unifloris, tubo nectarifero calyce subæquali.

Pelargonium trifoliatum. *Swt. hort. brit. p. 82. n. 267.*

Geranium trifoliatum. *Andrews's geran. c. ic.*

Pelargonium oxyphyllum. *DC. prodr. 1. p. 667.*

Stem shrubby, very much branched, smooth and glossy: *branches* slender, flexuose, swollen at the joints, lower part and joints very red. *Leaves* glaucous, trifoliate: *leaflets* entire, spreading, the middle one longest, tapering at both ends, linear, sharp-pointed, channelled, the sides folded inwards, sharply keeled at the back, the keel rough like a rasp: back ones shortest, divaricate. *Petioles* slender, a little flattened on the upper side, and rounded on the lower. *Stipules* subulately linear, red. *Peduncles* slender, thickened at the base, one-flowered. *Involucre* of 2 linearly subulate bractes. *Pedicles* shorter than the bractes. *Calyx* 5-cleft, smooth, segments lanceolate, taper-pointed, the upper one largest. *Nectariferous tube* about the length of the calyx, flattened on each side, and gibbous at the base. *Petals* 5, the two upper ones broadest, spatulate, rounded or sometimes slightly emarginate, white, more or less marked at the base with red stripes, lower ones ligulate, white with a small red stripe at the base. *Stamens* 10: *filaments* united at the base, 7 bearing anthers. *Style* smooth. *Stigmas* 5, reflexed.

Our drawing of this very distinct and curious species was taken from a plant at the Nursery of Mr. John Lee, at Hammersmith, last Summer; we were afraid that it had quite disappeared from our collections, as we had not seen it before for several years. M. Decandolle not being acquainted with Mr. Andrews's figure, supposed it to be an unpublished species, and has described it in his Prodrômus by the very appropriate title of *P. oxyphyllum*; but as Mr. Andrews has given a good figure of it, and also a very proper name, which was published several years ago, we have adopted it as having the right of priority.

This species is nearly related to *P. glaucum*, and, like it, requires to be preserved in a good greenhouse in Winter; and being also of a succulent nature, care must be taken not to overwater it; the best soil for it is a mixture of turfy loam, peat, and sand, being careful that the pots are well drained with potsherds; young cuttings strike root freely, if planted in pots in the same sort of soil, and placed on a shelf in the greenhouse.





CICONIUM micranthum.*Small-flowered Ciconium.*

C. micranthum, caule fruticoso carnosio, foliis cordato-reniformibus orbiculatis breviter 5-lobis crenatis utrinque molliter pubescentibus, stipulis cordatis ciliatis, umbellis multifloris, petalis rotundato-obovatis subemarginatis calyce sesquialongioribus, tubo nectarifero calyce duplo longiore.

Ciconium micranthum. *Swt. hort. brit.* p. 85. n. 23.

Geranium coccineum, var. *parviflorum*. *Hoare geran.* p. 2.

Stem shrubby, succulent, branching: *branches* stiff, erect, glossy, but slightly pubescent, naked below, and producing a few leaves only at the extremities. *Leaves* cordately reniform, rounded, slightly 5-lobed, shallowly notched, very soft to the touch, and densely clothed on both sides with a short pubescence: lobes rounded. *Petioles* nearly cylindrical, swollen at the base, thickly clothed with short spreading hairs. *Stipules* short, cordate, fringed. *Peduncles* lateral, long, erect, thickly clothed with short spreading hairs. *Umbels* many-flowered. *Involucre* of 6 cordately ovate, acute, fringed bractes. *Pedicles* short, hairy. *Calyx* 5-cleft, segments erect, oblong, bluntish, concave, thickly clothed with unequal spreading villous hairs. *Nectariferous tube* about twice the length of the calyx, thickly clothed with short hairs. *Petals* 5, roundly obovate or cuneate, sometimes emarginate, of a bright scarlet, and imbricate, the two upper ones rather shortest and smallest. *Filaments* 10, very short and erect; sometimes 6, at other times 7, bearing anthers. *Style* short, quite smooth. *Stigmas* 5, light flesh-coloured, slightly spreading.

This pretty little plant is an old inhabitant of our collections; it is amongst one of the first plants that we can recollect; but when it was introduced, or from where, is now not easy to be ascertained, as it does not appear to have been taken notice of in any botanical publication with which we are acquainted; it is more tender than the rest of the tribe to which it belongs, and requires to be kept in a good greenhouse to have it in health; and as it is of a succulent habit, it requires very little water in Winter; for if it happens to get too much, it will soon throw off its leaves, and will not be easily recovered; when in good health, and covered with its neat little round flowers, it makes a pretty appearance, and is the more desirable by being so very different in flower from all others; a mixture of turfy loam, peat, and sand, is a very proper soil for it; and the pots must be well drained with potsherds, that the wet may pass off readily. Cuttings root freely, planted in pots in the same sort of soil, and placed on a shelf in the greenhouse.

Our drawing was taken in September last, from a plant that was raised from a cutting, kindly sent to us by Sir R. C. Hoare, from his magnificent collection of Geraniaceæ at Stourhead, and who observed that it was well deserving a figure, on account of its singularity.





PELARGONIUM lasiophyllum.*Woolly divided-leaved Stork's-bill.*

P. lasiophyllum, foliis cordatis pinnatifido-lobatis incisodentatis utrinque villosotomentosis: lobis divaricatis acutis, stipulis cordato-ovatis acutis, pedunculis villosissimis plurifloris subpaniculatis, tubo nectarifero calyce sesquolongiore.

Pelargonium lasiophyllum. *Swt. hort. brit. p. 83. n. 341.*

Stem shrubby, rather succulent, thickly clothed with unequal spreading white villous hairs, as is every other part of the plant except the corolla: *branches* nearly erect, or slightly spreading, densely villous. *Leaves* cordate, deeply 5 to 9-lobed, or nearly pinnatifid, densely clothed on both sides with white villous down, strongly nerved underneath, the nerves branched: lobes spreading, wedge-shaped, acute, incised or toothed with bluntish teeth. *Petioles* flattened a little on the upper side, and convex on the lower, densely villous. *Stipules* cordately ovate, acute, joined to the base of the petioles. *Peduncles* in a sort of panicle, several-flowered. *Involucre* of 6 lanceolate, acute, villous bractes. *Pedicles* about the length of the bractes. *Calyx* 5-cleft, segments unequal, oblongly lanceolate, reflexed. *Nectariferous tube* about half as long again as the calyx, flattened on each side, gibbous at the base, and widened upwards. *Petals* 5, the 2 upper ones obovate, a little oblique at the base, of a reddish brick colour, stained with purple, and a light stroke to the base, in the middle is 2 dark purple spots, that are connected by a reddish shade, and from them to the base are some short dark lines, which are more or less branched: lower petals ligulate, brick coloured. *Stamens* 10, connected at the base, 7 bearing anthers, which, as far as we have observed, have always been without pollen. *Style* purple, thickly clothed with long rigid hairs. *Stigmas* 5. purple, reflexed.

A very curious hybrid production, raised at the Nursery of Mr. Colvill, from a seed of *P. fulgidum* that had been fertilized by the pollen of *P. Vandesiae*; it is as nearly as possible intermediate between the two, but we believe very few would guess its origin, had it not been known: it is a free strong growing plant, and is more hardy than many of its relatives, requiring nothing but a common greenhouse to keep it in good health: like the rest of that tribe, it succeeds best in a mixture of light turfy loam, peat, and sand, and the pots to be well drained; young cuttings strike root freely, if planted in pots, and placed on a shelf in the greenhouse.

Stems shrubby, rather succulent, thickly clothed with unequal spreading white villous hairs as every other part of the plant except the corolla: branches nearly erect, or slightly spreading, densely villous. Leaves cordate, deeply 3 to 9-lobed, or nearly pinnatifid, densely clothed on both sides with white villous down, strongly marked underneath, the nerves branched: lobes spreading, white edged, acute, incised or toothed with blunt teeth. Petioles flattened a little on the upper side, and convex on the lower, densely villous. Stipules cordately ovate, acute, joined to the base of the petioles. Pappus in a sort of umbel, several-flowered. Anthers of 6 lanceolate, acute, villous bristles. Pedicels about the length of the bristles. Ovary 2-celled, segments unequal, oblong, lanceolate, reflexed. Styles two about half as long again as the ovary, turned on each side, gibbous at the base, and widened upwards. Petals 5, the 2 upper obcordate, a little oblique at the base, of a reddish pink colour, stained with purple and a light stroke to the base, in the middle is a dark purple spot, that are connected by a reddish shade, and from them to the base are some short dark lines, which are more or less branched: lower petals ligulate, pink coloured. Stamens 10, connected at the base, 7 bearing anthers, which as far as we have observed, have always been with the pollen. Style purple, thickly clothed with long rigid hairs. Stigmas 2, purple, reflexed.

March 1871

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PELARGONIUM confertifolium.*Close-leaved Stork's-bill.*

P. confertifolium, caule suffruticoso ramoso; ramis brevibus erecto-adscendentibus confertis squamoso-rugosis: foliis confertis ternatis pinnatifidis simplicibus quinquelobisve molliter undique villosis: foliolis lobisque imbricatis obtusis crenato-dentatis, scapo simplici, umbella multiflora subprolifera, petalis omnibus obovatis, tubo nectarifero calyce reflexo duplo longiore.

Pelargonium confertifolium. *Swt. hort. brit. p. 77. n. 27.*

Geranium ardens, minor. *Andrews's geran. c. ic.*

Stem suffruticose, short and rugged, erect, about 4 or 6 inches in height, much branched: *branches* short, very much crowded, erect or ascending, very rugged and unequal, scaly, occasioned by the remains of the stipules and petioles, the upper part thickly clothed with soft villous hairs. *Leaves* very variable, some ternate or pinnatifid, others deeply 5-lobed and simple, covered all over with soft villous hairs: *leaflets, segments, or lobes*, obtusely rounded, and notched or toothed with blunt rounded teeth, imbricate or lapping over each other. *Petioles* slightly flattened on the upper side, and rounded on the lower, densely clothed with long, white, spreading, unequal, villous hairs. *Stipules* very short, broadly cordate, acute, fringed, and joined to the base of the petioles. *Scape* simple, cylindrical, elongated, thickly clothed with long spreading unequal hairs. *Umbel* many-flowered, generally proliferous. *Involucre* of several linear acute villous bractes. *Pedicles* long and slender, unequal in length, thickly clothed with unequal hairs. *Calyx* 5-cleft, segments lanceolate, scarcely acute, villous, the upper one broadest, erect, the others reflexed. *Petals* 5, all roundly obovate,

the two upper ones broadest, of a bright scarlet, tinged with brown, and two dark lines running down them, that are slightly branched: lower petals of nearly the same colour, but the lines fainter. *Filaments* 10, connected at the base, one of them a broadish spatulate one, as in the other plants of this section, 6 or 7 bearing anthers. *Style* short, thinly hairy. *Stigmas* 5, purple, reflexed.

This curious little plant is of hybrid origin, and appears to be intermediate between *P. fulgidum* and *P. pulchellum*, and, like the latter parent, is rather shy in producing its flowers; we do not know by whom it was first raised, but we first saw it at the Nursery of Mr. Lee, at Hammersmith, as long ago as the year 1816; it is not so much cultivated in our collections as it deserves to be, which we believe is chiefly owing to its not being well managed, and therefore produces but few flowers; but when well grown and covered with its handsome little flowers, we think none can exceed it in brilliancy: the umbels are very often prolific, which is also sometimes the case in *P. pulchellum*; it has certainly very little affinity with *P. ardens*, with which it has been confused, the habit of the plants being totally dissimilar, this being an erect suffruticose plant, producing innumerable leafy branches; whereas *P. ardens* is scarcely more than herbaceous, and produces very few leaves or branches, the leaves are also altogether different.

The best method of treating the present subject, is to pot it in an equal mixture of turfy loam, peat, and sand, and to have the pots well drained with potsherds, that it may not get sodden with too much wet; as the pot becomes filled with roots, it should be shifted into a larger one, to keep it growing freely, the only method of flowering it well: in Winter it requires very little water, and if allowed to get too much at that season, it will be very liable to rot off. Cuttings planted in pots, root readily, if planted in the same sort of soil, and placed on a shelf in the Greenhouse. Drawn at the Nursery of Mr. Colvill, in October last.





PELARGONIUM nitidum.*Glossy Stork's-bill.*

P. nitidum, caule erecto fruticoso subcarnoso squamoso, foliis tripartitis laciniato-lobatis nitidis margine subciliatis, stipulis persistentibus ovatis obtusis petiolo adhærentibus, umbellis multifloris subpaniculatis, petalis venosis, tubo nectarifero calyce duplo longiore.

Pelargonium nitidum. *Swt. hort. brit. p. 77. n. 24.*

Stem shrubby, erect, a little succulent, clothed with a brown glossy bark, and scaly, owing to the persistent stipules and base of the footstalks, very little branched. *Leaves* succulent, deeply 3-parted, or sometimes ternate, unequally lobed and jagged, smooth and glossy, the margins slightly fringed: leaflets or segments spreading, and toothed with unequal bluntish teeth. *Petioles* long, nearly cylindrical, or slightly furrowed on the upper side, thinly clothed with hairs. *Stipules* large, ovate, obtuse, a little concave, joined to the base of the petioles, and with them remaining persistent. *Umbels* many-flowered, in a sort of panicle. *Peduncles* swollen at the base, slightly hairy. *Involucre* of numerous lanceolate acute bractes. *Pedicles* nearly twice the length of the bractes, slightly pubescent. *Calyx* 5-cleft, hollow at the base; upper segment ovate, concave, erect; the others narrower, reflexed. *Nectariferous tube* about double the length of the calyx, gibbous at the base, scarcely pubescent. *Petals* 5, spreading, obovate, of a light scarlet, approaching to salmon colour, and elegantly marked with dark branching lines, the 2 upper ones about double the size of the others. *Filaments* 10, united at the base, seven bearing anthers, which were all

imperfect in our specimens. *Style* longer than the stamens.
Stigmas 5, reflexed.

This plant is also of hybrid origin, and was raised in 1822, at the Nursery of Mr. Colvill, from a seed of *P. fulgidum*, that had been fertilized by the pollen of *P. sanguineum*: in habit it is nearly intermediate between its two parents, partaking of the glossy foliage of *P. sanguineum*, and the hollow calyx and nectariferous tube of *P. fulgidum*: like its two parents, it is an abundant bloomer, and requires precisely the same mode of treatment, thriving well in a mixture of turfy loam, peat, and sand, and requiring but little water in Winter. Cuttings of it strike root freely, if planted in pots in the same sort of soil, in Spring or Summer, but they will not succeed so well if planted in Autumn; it may also be increased by the little tubers of its roots.



PELARGONIUM odoratissimum.*Sweet-scented Stork's-bill.*

P. odoratissimum, caule carnosso squamoso brevissimo, foliis subrotundo-cordatis obtuse crenulatis mollissimis, ramis floriferis prostratis, umbellis plurifloris, petalis calyce parum longioribus, tubo nectarifero calyce paulo brevior.

Pelargonium odoratissimum. Willden. sp. pl. 3. p. 657.

Pers. syn. 2. p. 229. *Hort. Kew. ed. 2. vol. 4. p. 167.*

DC. prodr. 1. p. 659.

Geranium odoratissimum. Andrews's *geran. t.* 40. *Cav. diss.* 4. p. 241. *t.* 103. *f.* 1.

Stem suffruticose, very short, branching; *branches* very short, thickly crowded with leaves, *flowering branches* elongated, prostrate, and producing numerous umbels of flowers. *Leaves* roundly cordate or kidney-shaped, obtusely crenulate, covered on both sides with a white mealy pubescence, very soft to the touch. *Petioles* a little flattened on the upper side, and convex on the lower, dilated at the base, downy. *Stipules* cordate, acute, membranaceous. *Peduncles* cylindrical, downy, 3 to 8-flowered. *Involucre* of 6 or 7 lanceolate, taper-pointed bractes. *Pedicles* a little longer than the nectariferous tube, thickly clothed with soft villous hairs. *Calyx* 5-cleft, segments lanceolate, acute, upper one erect, the others spreading when the flower is expanded, very hairy. *Nectariferous tube* flattened on both sides, gibbous at the base, rather shorter than the calyx. *Petals* 5, nearly equal, ligulate, white, a little longer than the calyx. *Filaments* 10, united at the base, 7 bearing anthers. *Germen* silky. *Style* short, pale flesh colour, slightly hairy at the base, and smooth on the upper part. *Stigmas* 5, flesh coloured, reflexed.

This curious plant is an old inhabitant of our gardens, having been introduced into them from the Cape, ever since the year 1724 ; it has formerly been much prized for the singular strong scent of its foliage, which by most people is thought to be very agreeable, but some few consider it quite the reverse ; it is now become rather scarce, as are most of the old original species, none of them being now much cultivated, except a few that are thought essential for producing the finest hybrids.

We think it very probable that *P. fragrans* is a hybrid production, between the present plant, and *P. exstipulatum*, as it is as near as possible intermediate between the two. The present plant thrives best in a light sandy soil, or a mixture of loam, peat, and sand, will suit it very well. Cuttings root readily, planted in pots, and placed on a shelf in the Greenhouse ; it may also be increased by cuttings of the roots. Our drawing was made at the Nursery of Mr. Colvill, in the King's-road, Chelsea.

Stems suffrutescent, very short, branching; branches very short, thickly crowded with leaves, flowering branches elongated, prostrate, and producing numerous umbels of flowers. Leaves roundly cordate or kidney-shaped, obscurely crenulate, covered on both sides with a white mealy pubescence, very soft to the touch. Petioles a little flattened on the upper side, and convex on the lower, dilated at the base, downy. Stipules cordate, acute, membranaceous. Peduncles cylindrical, downy, 3 to 8-flowered. Involucres of 6 or 7 lanceolate, taper-pointed bracts. Petioles a little longer than the nectariferous tube, thickly clothed with soft villous hairs. Calyx 5-lobed, segments lanceolate, acute, upper one erect, the others spreading when the flower is expanded, very hairy. Nectariferous tube flattened on both sides, gibbous at the base, rather shorter than the calyx. Petals 5, nearly equal, ligulate, white, a little longer than the calyx. Stamens 10, united at the base, 7 bearing anthers. Ovaries silky. Style short, pale flesh colour, slightly hairy at the base, and smooth on the upper part. Stigmas 2, flesh coloured, reflexed.



PELARGONIUM insignitum.*Marked-flowered Stork's-bill.*

P. insignitum, caule fruticoso villosa, foliis cordatis lobatis inaequaliter obtuse dentatis villosa-pubescentibus, umbellis plurifloris, petalis ramoso-venosis patentibus; superioribus cuneato-obovatis: tubo nectarifero calyce paulo longiore.

Stem shrubby, branching, thickly clothed with unequal villous hairs. *Leaves* cordate, ovate, deeply but irregularly lobed, unequally toothed with bluntish teeth, clothed on both sides with soft villous hairs, more or less undulate, the margins often curved inwards. *Petioles* short, flattened on the upper side and convex on the lower, thickly clothed with unequal villous hairs. *Stipules* lanceolate, acute, villous and fringed. *Peduncles* stout, also villous. *Umbels* several flowered. *Involucre* of 6 or 7 lanceolate, acute, fringed and villous bractes. *Pedicles* about the length of or a little longer than the bractes. *Calyx* 5-cleft: upper segment ovate, concave, erect; the others narrower and spreading, all clothed with soft villous hairs. *Nectariferous tube* about the length of, or a little longer than the calyx. *Petals* 5, spreading: the 2 upper ones cuneately obovate, of a bright scarlet, with a large dark patch near the base, and numerous dark lines which spread all over the petals, and are much branched: lower petals broadly ligulate, of a bright scarlet, also marked with dark branching lines. *Filaments* 10, united at the base, 7 bearing anthers, which were all imperfect in the specimens that we examined. *Style* longer than the stamens, hairy below, and smooth upwards. *Stigmas* 5, purple, reflexed, or revolute.

This pretty marked flowered plant, is a hybrid production, and was raised in the fine collection of R. H. Jenkinson, Esq. from a seed that had been produced by *P. fulgidum*, intermixed with one known by the name of *Black Prince* in the gardens; the habit of the plant is as near as possible intermediate between the two parents, partaking of the former in its general appearance, but of the latter in the shape and marking of the flowers; like the rest of the tribe to which it belongs, it succeeds best in a light sandy soil, or a mixture of turfy loam, peat, and sand, will suit it very well, being careful not to overwater it in Winter. Cuttings root freely, planted in the same sort of soil, and placed on a shelf in the Greenhouse. Drawn from a plant in the Greenhouse of R. H. Jenkinson, Esq. in the Autumn of 1824.

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ERRATA IN VOLUME III.

At folio 210, line 1st and 3d, for “ PELARGONIUM fuscatum,” read “ PELARGONIUM fusciflorum.”

Folio 272, line 1st, 3d, and 9th, for “ PELARGONIUM Bishopæ,” read “ Pelargonium Bisshoppæ,” and at line 2d, for “ Mrs. Bishop's,” read “ Mrs. Bisshopp's.”

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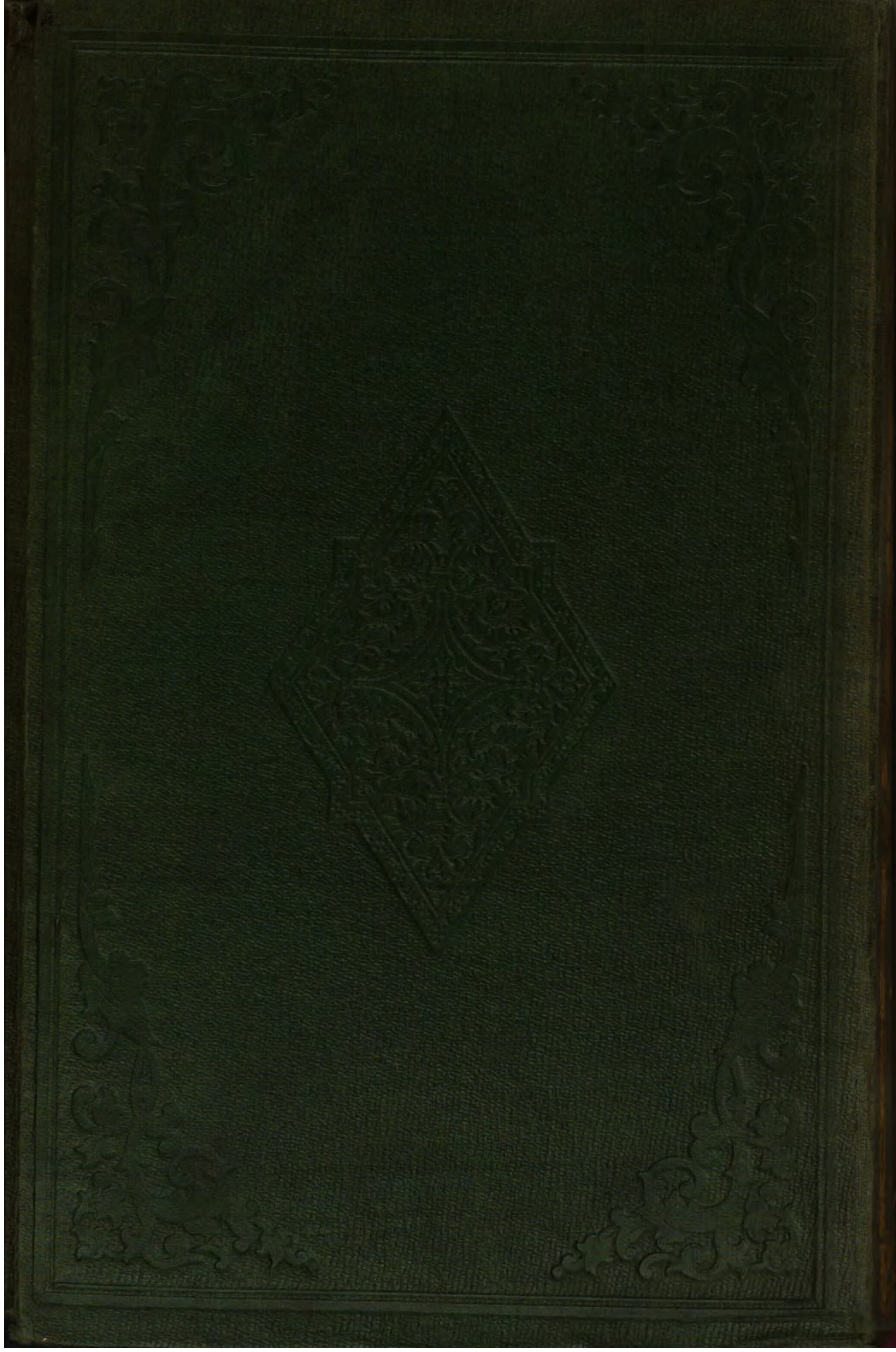
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